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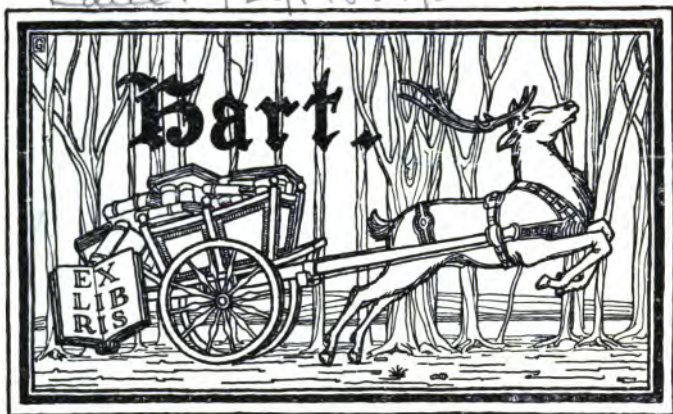
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CITIZENSHIP IN PHILADELPHIA



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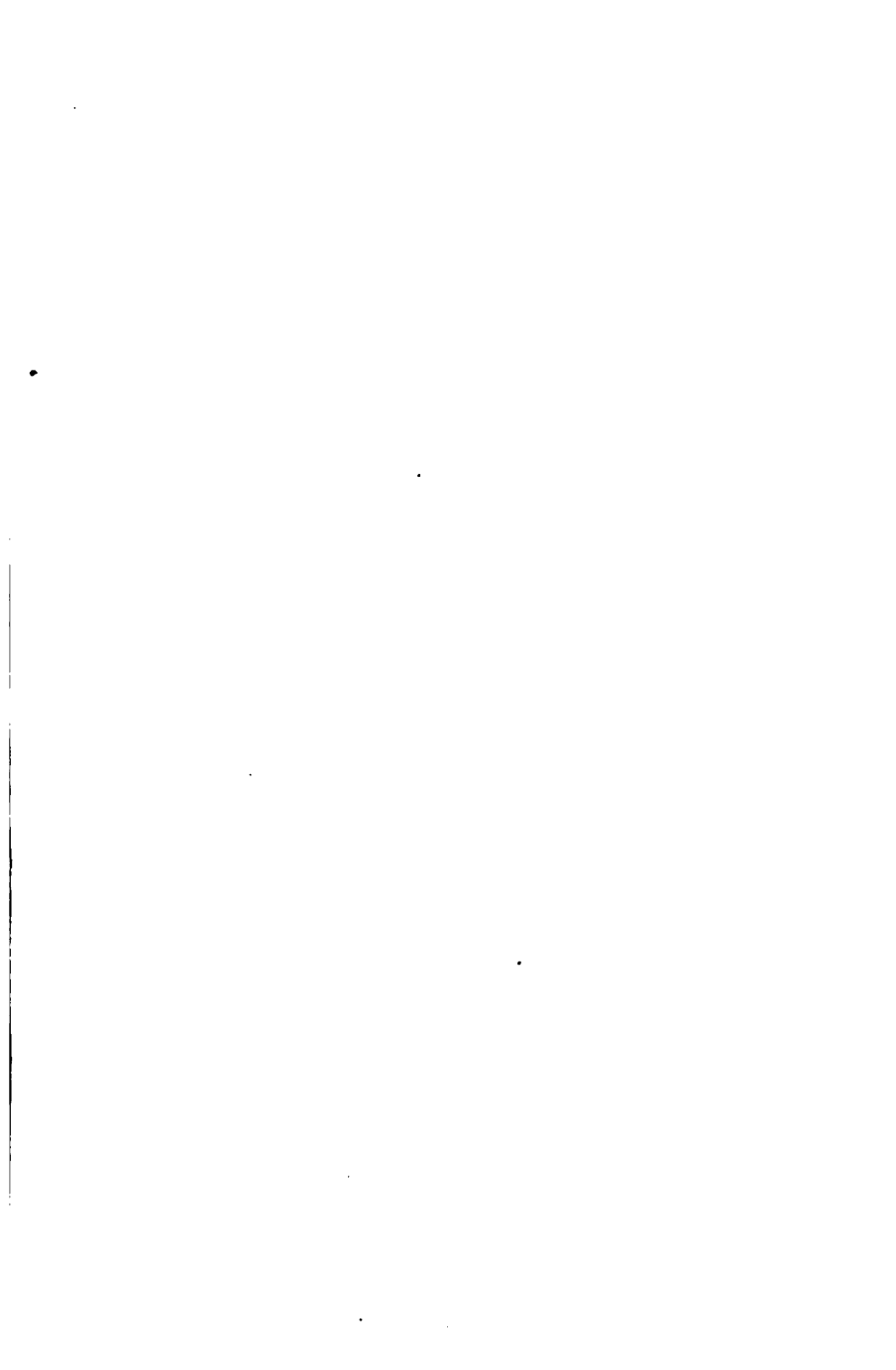
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CITY HALL TOWER BY NIGHT

CITIZENSHIP IN PHILADELPHIA

BY

J. LYNN BARNARD, Ph.D.

PHILADELPHIA SCHOOL OF PEDAGOGY

AND

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FREDERICK P. GRUENBERG, DIRECTOR



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Governments, like clocks, go from the motion men give them; and as governments are made and moved by men, so by them they are ruined too. Wherefore governments rather depend upon men than men upon governments. . . . That, therefore, which makes good constitution must keep it, viz.: men of wisdom and virtue, qualities that because they descend not with worldly inheritances must be carefully propagated by a virtuous education of youth.

—Penn's Frame of Government (1682).

PREFACE

There is visible everywhere in the United States an increasing interest in public welfare and in city government which has so much to do with securing it. The usual text-book in civics naturally gives fuller treatment of the national government, which is uniform for the whole country, than of state and city, which are everywhere different. And even special texts in municipal government can give only a general survey of the field. *Each city needs a book of its own.*

Moreover, the belief is growing that the formal teaching of the structure and legal powers of government has had its day in our schools. In its place is coming the instruction which concerns itself chiefly with the functions of government; with what is done, and why; with the ways in which we all may help, individually and in organized groups. *There is need, accordingly, for books which emphasize the elements of public welfare.*

As a part of this new order of things there is coming a realization of the simple but important truth that the primary object of civic teaching is, after all, to make good citizens. It has well been said that good citizenship—the sort that is good for something—means efficient service in the community, be that community the city, the state, or the nation. *There is need for books which give the sort of practical information about community activities that awakens live interest and stimulates to good citizenship.*

To try to satisfy these three needs has been the object

of the authors of this book. It deals exclusively with Philadelphia, leaving to other texts the discussion of the state and federal governments; it dwells at length upon the collective activities of the city; it aims to show in every case what are the further needs of the city and how good citizens may help to meet them.

The book is the outcome of several years of teaching community civics in the Philadelphia schools. When the new course in civics was first inaugurated the teachers were at a loss for material on city affairs. About them was the complex machinery of the city government, but there seemed to be no way to understand it except by personal research. There was little in print and that little was fragmentary and out of date. Gradually, as a result of the collection of reports and newspaper articles, of repeated visits to City Hall, and of trips of investigation about the city, much information has been collected. And now that all the elementary schools are to undertake instruction in city affairs it seems worth while to put in print the results of this research, to help the hundreds of teachers who will be attacking the problem for the first time.

The attempt has been made to write about the work of the city departments in a way that can be understood by the young citizen. But it is believed that this will not detract from the value of the book as a source of information for the adult citizen. At the present time there exists no other comprehensive study of the government of Philadelphia to satisfy the increasing interest in city affairs. In this book will be found a large body of reliable information along varied lines of civic activity, so arranged as to be readily accessible to clergymen,

social workers, civic clubs, and all citizens interested in the public welfare.

Valuable aid in preparation has been secured from the Bureau of Municipal Research. The following members of the bureau have given of their time to writing special chapters, and they have also read and criticized some of the other chapters: Mr. Frederick P. Gruenberg, Dr. Neva R. Deardorff, Mr. William C. Beyer, Mr. Robert J. Patterson, Mr. Robert E. Tracy. Both in the writing of the book and in the collection of illustrative material most efficient help has been rendered by Miss Mary W. Stewart, Miss Anna C. Clauder, Miss Cleora Sutch, and Miss Mary E. Doheny of the Department of History and Civics of the William Penn High School. One chapter has been contributed by Mrs. J. Lynn Barnard, whose first-hand knowledge of the subject treated makes her contribution especially welcome. The cordial and interested coöperation that has been extended by city officials and by executive secretaries of private organizations engaged in public welfare work is also gratefully acknowledged.

PHILADELPHIA, *August 1, 1918.*



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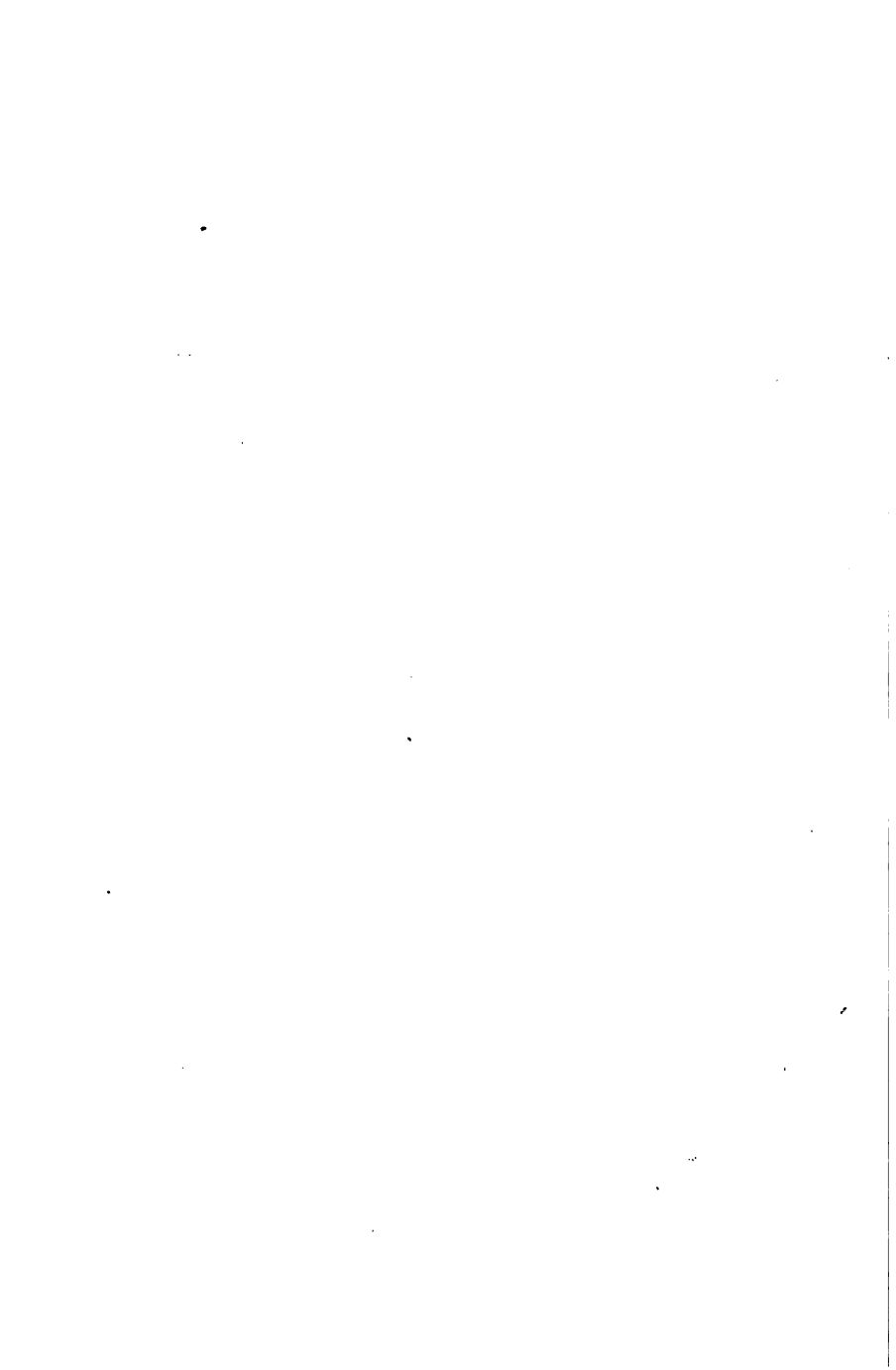


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CHAPTER I

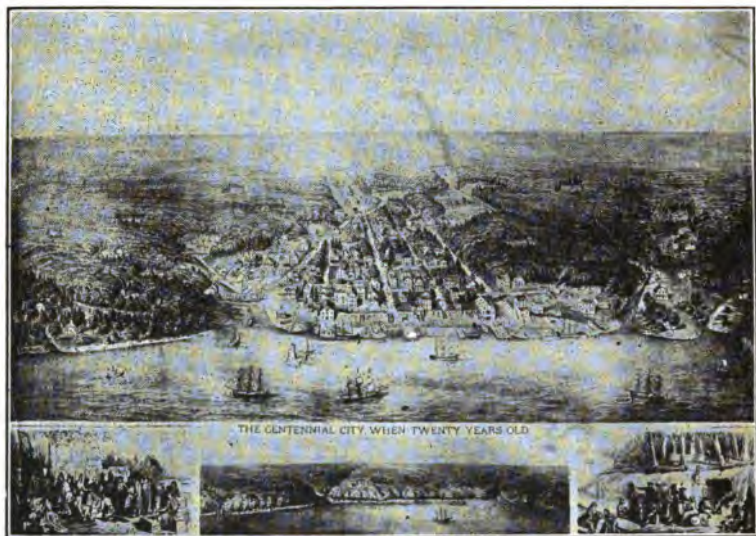
PHILADELPHIA—A COMMUNITY

Two centuries ago Philadelphia was a small village on the edge of the Delaware, with only a few hundred inhabitants and with none of the big buildings or the paved streets or the parks and playgrounds or the libraries and museums that we see to-day.

As this little village grew larger and larger, the necessity for the people to work together to meet common wants became ever more pressing. This chapter tells how various efforts were made to satisfy these wants. No attempt is made to sketch even a brief history of Philadelphia, but only to trace its early growth along a few lines in order to illustrate the way in which this particular community developed civically from a village into a city.

One citizen will be discovered, the great Benjamin Franklin, who was so alive to civic needs, so clever in thinking out ways to meet them, and so enterprising in getting his ideas carried out, that he serves as the embodiment of civic spirit and civic achievement—as an ideal of the good citizen. As you read a brief story of his service to Philadelphia, you will understand why it is necessary for people to do things together as a community. You will see, too, how important it is for all citizens to take an interest in public affairs, to pay their share willingly, and to do some things that may be personally inconvenient in order that their community activities may be successful. Accordingly, his story

will be told in some detail. And this introductory chapter will end at that point, for its purpose will have been fulfilled if the boys and girls who read it shall have gotten some idea of community growth and of the kind of citizenship that alone makes such growth possible.



THE VILLAGE OF PHILADELPHIA

The little stream at the left of the picture was Dock Creek, the present site of Dock Street. The little pond on the outskirts of the town was known as the Duck Pond. The location is now Fourth and Market. The main street running west from the river was called High Street, now Market Street. At the extreme left of the picture is Old Swedes' Church.

The City of Penn.—In an interesting pamphlet published in 1685, Penn gives us a clear picture of his new city as it emerged from the "cave-dweller" epoch. He describes it as two miles long and a mile wide, with High Street (now Market) and Broad Street each a hundred feet in breadth, and with eight streets parallel to High Street and twenty cross-streets parallel to Broad

Street. And he adds that the names of these streets were “mostly taken from the things that spontaneously grow in the country, as Vine, Mulberry, Chestnut, Walnut, Strawberry, Cranberry, Plum, Hickory, Pine, Oake, Beach, Ash, Poplar, Sassafras, and the like.” Many



MARKET STREET NEAR SECOND

Showing Christ Church about 1740.

of these names are still in use, though not always applied as in Penn's time.

Thomas Holme, surveyor general of the province, who had come over in 1681 to lay out the city and locate building lots, gives us some additional information about the original plan. “In the centre of the city is a square [now Penn Square] of ten acres; at each angle are to be houses for public affairs, as a Meeting House, Assembly

or State House, Market House, School House, and several other buildings for public concerns. There is also in each quarter of the city a square of eight acres to be for the like uses as the Moorfields in London." And he further informs us that all the streets except High and Broad are fifty feet in width.

The Schuylkill River did not become as important commercially as Penn had thought it would; the town grew but slowly toward the west, and so "Center Square" (now Penn Square) was too far away for a location for the "houses for public affairs." A meeting-house was finally erected near the square, Watson tells us in his "Annals of Philadelphia," but "it was so far out of town that it was not used and so fell into decay." The founders of the city built their homes mostly on Front Street, facing the Delaware; and for the first quarter-century a resident west of Seventh Street might well feel himself a suburbanite—if not a "commuter"!

The earliest footways, we are told, were of brick and gravel, or gravel only, and the streets were invariably either muddy or dusty. The first paving of roadways was apparently of pebbles, which the inhabitants often voluntarily placed in front of their premises, from the "kennel" (gutter) to the middle of the street. Not till the eighteenth century was half over was there united effort at paving, and then lotteries were made use of to pay for it. And throughout the century numerous "dirty places" were complained of by successive grand juries.

Watson assures us that for a few years after the founding of the city no public precautions were taken against fire. And the first act of the legislature with this in view

strikes one as picturesque rather than effectual. Householders were not to clean their chimneys by firing them, nor allow them to take fire, under penalty of forty shillings; each householder was to keep at hand a swab twelve to fourteen feet long, and a bucket or pail, under penalty of sixteen shillings; and, finally, no one was to smoke tobacco in the streets, night or day, under penalty of one shilling. The fines collected were to buy leather buckets, ladders, and engines.

In John Russell Young's "Memorial History of Philadelphia," Vol. I, we read that education was begun in Philadelphia by the Council of the Colony on December 26, 1683. And the following quaint extract is given from the minutes of that date. "The Govr and Provll Council having taken into their Serious Consideration the great Necessity there is of a School Master for ye Instruction & Sober Education of Youth in the towne of Philadelphia, Sent for Enoch flower, an Inhabitant of the said Towne, who for twenty year past hath exercised in that care and Imployment in England to whom haveing Communicated their Minds, he Embraced it upon these following termes: to learne to read English 4s by the Quarter, to Learne to read and write 6s by ye Quarter, to learne to read, Write, and Cast accot 8s by Quarter; for Boarding a Scholler, that is to say, dyet, Washing, Lodging, & Schooling, Tenn pounds for one whole year." How could education have had a more delightful start in the City of Penn?

For the next half-century Philadelphia grew rapidly, and with this rapid growth in population there was increasing need for the town itself to look after all sorts of civic interests that could no longer be properly attended

to by private citizens. Unfortunately, the town government proved unequal to the task. The legislative body, known as the "Common Council," was unbusinesslike, and there was no efficient administrative department. Precious time was wasted, and such public works as were



THE STATE HOUSE (INDEPENDENCE HALL) IN 1778

From a drawing of that date by C. W. Peale.

found necessary were built extravagantly. Streets, police and fire protection, taxation, all alike suffered from lack of leadership and business ability.

Fortunate it was for Philadelphia that at the close of this period the city should have found itself possessed of a citizen of rare civic insight, who was beginning to see the need for collective action and who knew how to go about securing it. The story of this man's remarkable

civic activities will perhaps best illustrate how Philadelphia came to realize itself as a "Community" and to appreciate what it meant to be a "citizen."

Franklin, the Civic Statesman.—Philade'phia is to-day a proud city of a million and three-quarters of inhabitants and an area of 129½ square miles. It is hard for us to realize that in the days when the great Benjamin Franklin walked its streets it was little more than a country village, where the government was weak and inefficient, and where each householder looked after his own interests and had not learned to coöperate with his neighbors for the common good. In fact, had it not been for their remarkable fellow-townsmen, the citizens would have learned the community lesson later than they did. In his Autobiography, which every school boy and girl ought to read, Franklin pictures the growth of public spirit in Philadelphia, and shows how one function after another came to be regarded as a matter of common concern in which all should coöperate. Suppose we let him tell us the story so far as possible in his own delightful fashion.

"And now [about 1730] I set on foot my first project of a public nature, that for a subscription library. I drew up the proposals, got them put into form, procured fifty subscribers of forty shillings each to begin with, and ten shillings a year for fifty years, the term our company was to continue. We afterwards obtained a charter, the company being increased to one hundred; this was the mother of all the North American subscription libraries, now so numerous." Thus was founded the present Philadelphia Library, now at Locust and Juniper Streets, with its 400,000 volumes, which,

while not a part of the free library system of the city, is a valuable adjunct to it.

And now a new want manifested itself to Franklin; the town had no adequate police force and no fire department. Hear his quaint description of the situation. "The city watch was one of the first things perceived to want regulation. It was managed by the constables of the respective wards in turn; the constable warned a number of housekeepers to attend him for the night. Those who chose never to attend, paid him six shillings a year to be excused, which was supposed to be for hiring substitutes, but was, in reality, much more than was necessary for that purpose, and made the constableship a place of profit; and the constable, for a little drink, often got such ragmuffins about him as a watch, that respectable housekeepers did not chose to mix with. Walking the rounds, too, was often neglected, and most of the nights spent in tippling. . . . I proposed as a more effectual watch the hiring of proper men to serve constantly in that business; and as a more equitable way of supporting the charge, the levying of a tax that should be proportioned to the property. This proposal paved the way for the law obtained a few years after." Such was the simple beginning of a police department.

Franklin next discussed publicly the question of fires and the need of their prevention; and soon afterwards, in 1736, he organized the Union Fire Company, which lasted for over fifty years. "Our articles of agreement," he tells us, "obliged every member to keep always in good order, and fit for use, a certain number of leather buckets, with strong bags and baskets for packing and transporting of goods, which were to be brought to every

fire; and we agreed to meet once a month and spend a social evening together, in discoursing and communicating such ideas as occurred to us upon the subject of fires, as might be useful in our conduct on such occasions." The small fines paid by members absent from these



OLD ACADEMY BUILDINGS

The old academy buildings in Fourth Street, as originally constructed in 1744. This academy was the foundation from which grew the University of Pennsylvania.

monthly meetings were used for the purchase of fire-fighting apparatus, so that Franklin came to doubt whether there was a city in the world better equipped than Philadelphia. Thus began the system of volunteer fire companies, to be succeeded in time by a paid fire department splendidly equipped and disciplined.

It is not strange that Franklin should have turned his thoughts toward the education of youth, and have become

the founder of an academy in 1749, a combination of pay and free school under private control. This academy was later developed into the University of Pennsylvania; and Franklin notes with pride, in later life, that he had been continued one of its trustees for forty years.

Library, police and fire departments, University—what a list of public enterprises for one man to help originate! But still his civic spirit and keen discernment of civic needs spurred him on to further accomplishment. A close friend of his, a physician, had tried in vain to start a hospital for “poor sick persons, whether inhabitants of the province or strangers.” But not until the influential Franklin lent the project his aid was the hospital financed and incorporated.

Soon after this he determined to see what could be done about the streets in the way of paving, cleaning, and lighting. Franklin complains in his Autobiography that “in wet weather the wheels of heavy carriages plough’d them [the streets] into a quagmire, so that it was difficult to cross them; and in dry weather the dust was offensive.” And he goes on to tell us: “I had liv’d near what was called the Jersey Market, and saw with pain the inhabitants wading in mud while purchasing their provisions. A strip of ground down the middle of that market was at length pav’d with brick, so that, being once in the market, they had firm footing, but were often over shoes in dirt to get there. By talking and writing on the subject, I was at length instrumental in getting the street pav’d with stone between the market and the brick’d foot-pavement, that was on each side next the houses. This, for some time, gave an easy access to the market dry-shod; but, the rest of the street

not being pav'd, whenever a carriage came out of the mud upon this pavement, it shook off and left its dirt upon it, and it was soon cover'd with mire, which was not remov'd, the city as yet having no scavengers." This is what Franklin did about it.

"After some inquiry, I found a poor, industrious man, who was willing to undertake keeping the pavement clean, by sweeping it twice a week, carrying off the dirt from before all the neighbors' doors, for the sum of six-pence per month, to be paid by each house." Thereupon Franklin wrote and printed a paper setting forth the advantages that would accrue to householder and store-keeper alike from keeping the streets clean, and followed this up with a successful house-to-house canvass. "All the inhabitants of the city were delighted with the cleanliness of the pavement that surrounded the market, it being a convenience to all, and this raised a general desire to have all the streets pav'd, and made the people more willing to submit to a tax for that purpose."

Later Franklin drew up a bill for paving the city, and introduced it in the Assembly. This was passed, "with an additional provision for lighting as well as paving the streets, which was a great improvement." To another citizen of Philadelphia Franklin gives credit for the lighting idea, reserving for himself only the credit of substituting ventilated four-sided lamps that would not smoke for the London type of globe lamp that would not do much of anything else. These new lamps "continued bright till morning, and an accidental stroke would generally break but a single pane, easily repaired."

While in England Franklin suggested to a friend of his a simple method of sweeping the London streets, and one

phase of that plan will bear repetition for Philadelphia's benefit now. It was simply this, that the streets should be swept "before the shops and windows of houses are usually opened, when the scavengers, with close-covered carts, shall also carry it all away." If alive to-day, Franklin would be insisting on the use of vacuum cleaners and air-tight carts, or else underground chutes into which all débris should be driven and by which it would be carried to the dumping grounds.

Oh, for a Franklin as Efficiency Engineer in each city of this land of ours! Safety, health, education, communication, public works—all the functions of a modern municipality were foreseen and foreshadowed by this one man. Always a generation or more in advance of his times, this many-sided citizen embodied in his own life the growth of Philadelphia as it took on one civic function after another, until it emerged as the largest and finest city in the American colonies.

CHAPTER II

HEALTH

Cities Create Health Problems.—So long as people lived out on farms, each family looked after the health of its own members and the community did not have to take a very active part. It was largely concerned in seeing that the quarantine was maintained against plague diseases like leprosy, smallpox, and cholera. But as soon as families begin to live in cities and towns, health matters become many-sided community problems. Contagious diseases are easily transmitted, a polluted water supply sickens not only one family but hundreds; flies, rats, and vermin carry diseases from house to house and from tenement to tenement; filth of all kinds accumulates rapidly; even the very air sometimes becomes offensive and laden with disease. Under date of September 23, 1800, Thomas Jefferson in a letter to Doctor Benjamin Rush of Philadelphia said, "I view great cities as pestilential to the morals, the health, and the liberties of man." Many of these conditions are such that the individual citizen or the single family cannot possibly change them. If the bad conditions are to be improved, it must be by the action of the whole community.

Efforts to Secure Wholesome Food.—Everyone recognizes that good, clean, wholesome food is essential to health, but not everyone sees that city conditions often make it very hard to obtain, particularly for people of small income. The family on the farm very largely pro-

duced its own food. It kept cows and therefore produced its own milk, cream, butter, and cheese. It raised its own vegetables, fruits, and cereals. It got eggs and meat supply from its poultry, cattle, sheep, and hogs. All of its foods were fresh or were preserved in ways that did not harm the product. But the people who live in large cities cannot thus know about the source of their food supply. They do not know where the milk comes from that they use, or the butter, or the eggs, or the vegetables, or the meats. Very likely they come from all parts of the United States. In some cases milk is produced as far as a thousand miles from the city where it is used. The demand in the cities is so great and the price so high that it becomes a business to go out over the country collecting foods and bring them to the city for sale. This is usually called the "commission" business.

Now one can readily see that in all these processes of shipping, handling, and selling two or three or more times, there are many opportunities for contamination of certain foods, for disposing of unhealthful products, for adulteration, and for various other kinds of dangers to creep in. Many of these dangers cannot be detected from the appearance of the food at the time it reaches the consumer.

People in Philadelphia first realized these dangers in connection with milk. Because it is used as food for babies, and therefore should never be adulterated, and because it is peculiarly liable to carry certain very serious diseases, the community has felt keenly its duty to see that the supply is as pure and wholesome as is possible.

In 1914 Philadelphia required that the general milk

supply of the city should be pasteurized, that is, heated to a high temperature. This is considered a very important advance step because, if properly done, it insures that the milk for a certain period afterwards will be free from disease. Inspectors obtain samples of milk from stores and restaurants, from railroad and trolley platforms, from wagons and bottling plants. These are tested at City Hall for bacteria. Bacteria are minute forms of vegetable life. Many kinds of bacteria cause disease. Other inspectors spend their entire time at the pasteurizing plants, noting the sanitary conditions of the places and whether or not the pasteurizing process is being properly carried out. Still other inspectors go about the city inspecting milk in the places where it is sold. They see that it is being kept at the proper temperature and that it has not been adulterated. They also inspect the stores themselves to see that they are being kept in a sanitary condition. If a dealer or handler of milk does not comply with the rules, his license is taken away from him, and he is no longer permitted to carry on the milk business in this city. More milk inspectors are needed, for their number has not increased in proportion to the city's population.

Besides milk, the city also inspects meats to see that they carry no disease to consumers. To do this inspec-



(Courtesy of the Bureau of Health)
DIRTY SEDIMENT IN THE BOTTOM
OF A BOTTLE OF MILK

tions are made of the live animals ready for slaughter; certain rules are prescribed about the slaughtering process and the selling of meats, poultry, and fish; and inspectors see that these rules are observed. For this work the city employs a veterinarian and seven assistants. Four of the assistants inspect animals before and after they have been slaughtered. They have sixty-nine slaughter houses under their care. One inspector is stationed at the wholesale meat houses, another at the wholesale fish market, and the seventh has charge of the preparing plants and the chicken slaughter houses. It can readily be seen that more inspectors are needed to do all this work thoroughly. Now, almost all the hogs, sheep, and goats are killed without inspection. One of the proposed solutions of this problem is to have a municipal slaughter house which would take the place of the sixty-nine privately owned abattoirs. Inspection would be comparatively easy at such a place.

A state law now requires a medical examination twice a year of people who handle food in hotels, dining cars, restaurants, and other public eating places, and also provides that "no dishes, receptacles, or utensils used in eating or drinking shall be furnished to patrons or customers of any such public eating place unless the same have been thoroughly cleansed since used by another individual." As yet the Bureau of Health has no employees especially detailed to see that this law is carefully enforced.

In June, 1916, Councils passed an ordinance which prohibited certain practices in the selling of various other kinds of foods but did not provide any officers to see to its enforcement. Its principal aim was to prevent the

exposure of foods to street dirt, flies, and other sources of contamination during the summer months.

The state and the national governments also have officers whose duty it is to see that national and state laws regarding the condition, handling, and labeling of foods offered for sale are enforced. The Pennsylvania Dairy and Food Commission has agents who inspect eggs, milk and cream, ice cream, cheese, butter, oleomargarine, lard, meat, sausage, fruits, vegetables, spices, non-alcoholic drinks, vinegar, and fruit syrup to see that the Pure Food, Cold Storage, and other laws are enforced throughout the state. The full time of one inspector and half the time of another is devoted to inspection in Philadelphia. When it is found that the laws have been disobeyed, the food is stamped, "Not to be sold in Pennsylvania." The State Livestock Sanitary Board quarantines contagious diseases among livestock and inspects herds at dairies outside which send milk into the city.

The United States Bureau of Chemistry keeps two inspectors in Philadelphia to watch for violations of the Food and Drugs act, and the United States Bureau of Animal Industry has about sixty inspectors on duty here in the packing houses, slaughter houses, and butcher shops which sell fat for lard, oleo, etc. There are twelve abattoirs and forty-seven preparing plants under federal inspection. All of these federal officers can interfere only in businesses which are doing an interstate trade.

Water.—Elsewhere will be found a description of the water works of Philadelphia considered as a business undertaking. It must not be forgotten that the water supply has a very great deal to do with health. Typhoid fever, a disease that formerly caused the death of hun-

dreds of persons each year and made ill many hundreds of others, was spread largely by the drinking water which was polluted with typhoid germs. Now that our water supply is filtered and treated with chlorine, typhoid has almost disappeared from the city.

Water is also important to health in other ways. There should always be an abundance for purposes of cleanliness, which is essential to health, and it should be clear and cool and appetizing. All doctors tell us that we should drink much more water than the average person now drinks. The supply, therefore, should be such as would not make it difficult or disagreeable to follow this advice.

Fresh Air and Light.—People are very much like sun-loving plants. To be healthy they should have plenty of fresh air and sunlight. These are free gifts of nature and it would seem that they should be free to all. But such is not the case when people live in congested groups in cities. The land is cut up into very small pieces and owned by many different persons. One man builds a house that very nearly covers all the land he owns. As long as the lots around him remain vacant his house is supplied with air and light, but when all his neighbors do the same as he has done the result is a group of dark, ill-ventilated, unhealthful houses or flats. In a great majority of cases these are rented to people who cannot afford to pay very much rent. There are no yards nor porches where children can play, and the houses are overcrowded. This is apt to result in much sickness and many deaths. Until comparatively recently such houses have been cheaply built, without proper plumbing, without fire-escapes, and in many other ways unfit for decent

and safe living. On account of the overcrowding and the cheap construction, the landlord has been able to charge low rents and at the same time make a very large profit.

It is now an accepted principle in law that it is the duty of the state and the city to prevent anything which threatens to harm the health or morals of the people. This is known as the police power of government. Under this power rules called the Building Code have been made which prescribe what may and may not be done in the building of houses.

Two bureaus in the city government are charged with the enforcement of this code. The Bureau of Building Inspection in the Department of Public Safety issues building permits after it has inspected the plans of a proposed building or alteration. It has also inspectors who report whether or not the requirements of the law have been observed when the building was actually put up. It is especially concerned to see that the laws to prevent accidents have been and are being enforced. The Division of Housing and Sanitation in the Bureau of Health, on the other hand, inspects plans and buildings to see that the health laws have been observed. Its supervision covers the use, occupancy, sanitation, and maintenance of all buildings, grounds, and vacant lands within the city limits. Damp cellars and walls, leaky roofs, dark and ill-ventilated rooms, overcrowding, out-of-door toilets, lack of water connections, dark and narrow stairs, and dirty houses and yards are particular points in housing with which this division concerns itself.

In the Division of Housing and Sanitation there are at present about thirty-five inspectors on general housing and sanitation, and eight who devote their entire time to

tenement and rooming houses which come under special provisions of the housing law. When a complaint that the law is being violated is received, an inspector in uniform and wearing a badge goes to the place and makes an inspection. If the law has been violated he



(Courtesy of the Bureau of Health)

INSANITARY LODGING HOUSE
Condemned by the Bureau of Health.

gives a written order to the owner or agent to make the necessary repairs and alterations. After a sufficient time has been allowed he makes a second inspection. If conditions are not remedied after due warning the owner is prosecuted and fined. If he then persists he can be taken into court again and again, until it becomes cheaper for him to repair his house than to pay the fines.

The Chief of the Division of Housing and Sanitation has the power to declare any house "unfit for human habitation" when he thinks that it violates any housing law or ordinance. When he does this he posts a notice on the door, and orders the tenant to vacate the premises. He may give the tenant from two days to one month in which to find another place to live. If the tenant remains both he and the owner can be prosecuted. As the housing laws now stand the city officials are the only ones who have any authority to enforce them. Neither state nor national government can interfere in any way.

Citizens can help very greatly in the enforcement of the housing laws if they will see, before they rent a house, that

it is properly constructed and in good condition. They should see that there are outside windows in every room and that there is sunlight in the bathroom, that there is a toilet and bath in good repair, that the cellar is cemented, dry, light, and has good stairs, that the roof is in good condition, that the stairways will allow an easy exit in case of fire, and that the premises are cleaned up thoroughly before they move in.

Unhealthful conditions may also be caused by other things than the building itself; for instance, by an



(Courtesy of the Bureau of Health)

BREEDING PLACES FOR MOSQUITOES

Barrels and tins that collect water are fertile breeding places of mosquitoes.

offensive stable, a piggery, or a mosquito-breeding pond. A general name has been applied to such conditions, they are called "nuisances." This word as defined in the law will cover anything which in the opinion of the Board of Health "may have a tendency . . . to endanger the health of the citizens." It applies to all sorts of things—from leaving a dead cat in the alley to having an evil-smelling bone-boiling plant. The Division of Housing and Sanitation may order any such condition changed and the cause of the trouble removed. If the owner refuses to remedy the bad condition the division has the power to go ahead and make whatever changes are necessary and compel the owner to pay for them.

One of the worst nuisances to which people can be subjected is the smoke nuisance, which can ruin a whole neighborhood. It makes the air offensive to breathe and creates certain health dangers. Houses and buildings are made dingy; plants and trees die; and the entire neighborhood becomes drab and ugly. Much is now being done to do away with smoke. Railroads are using electric power to get their trains in and out of the city, and various kinds of mechanical devices and fuels are being developed to get rid of this nuisance. In Philadelphia the Bureau of Boiler Inspection in the Department of Public Safety is in charge of enforcing the laws on smoke abatement.

Removal of Filth and Ashes.—In connection with this question of nuisances the problem of keeping the city clean looms very large. Rubbish, garbage, ashes, and street dirt accumulate very fast, and all of these things can help to spread disease by means of flies and dust. We cannot discuss the details of the problem here. We merely

wish to emphasize that keeping our city clean is not only a question of appearances but also one of health, and that if this work is not well done the health of the citizen is endangered.

Sewage Disposal.—A problem of sanitation that is becoming increasingly important is the disposal of sewage.

Formerly it was customary to have sewers drain into the nearest large body of water, whether it were a river, a lake, or the ocean. Sometimes the water supply was taken from the same river or lake. When this practice was followed by large cities it caused a great amount of sickness and large numbers of deaths, because certain diseases are easily transmitted by water. Now



(Courtesy of the Bureau of Health)

INSANITARY ALLEY CONDITIONS

very careful attention is being paid to disposing of sewage so that it will not thus endanger health. By some of the most up-to-date methods the fluid portions are drained off and are rendered harmless by chemical or other treatment, and the solid portions are manufactured into a valuable form of inoffensive fertilizer.

Quiet Necessary to Health.—It is becoming more and more recognized that with the hard work people now do they must have complete relaxation and plenty of sound sleep. Health authorities are coming to see that it is

their duty to prevent unnecessary noise and to see that people are not needlessly kept awake. There is a real public health question back of those amusing cases that one reads of occasionally in the newspaper, where one citizen tries to prevent another from keeping a noisy rooster or an annoying parrot.

Parks and Playgrounds.—There are many reasons why we should have parks, playgrounds, and open spaces in our city, but none is more important than the health reason. Both children and adults need to be out in the fresh clean air just as much as work, school, and other duties will permit. Since it has become impossible for every family in the city to have its own porch and yard, many communities now provide one large yard and playground for the common use of the neighborhood. As parks and playgrounds are to be discussed elsewhere, in other connections, it is sufficient to say here that outdoor recreation is another of those things which make people happier and healthier and should be encouraged.

Contagious Diseases.—We all know that certain diseases are “catching” and that they are “caught” in various ways. These diseases are, of course, preventable, and it seems a great pity that we have not yet been able to stamp them out entirely, since they cause so much needless expense and suffering.

Medical science has been able to discover the exact ways in which most of these diseases are transmitted from one person to others; and on the basis of this knowledge laws have been passed which prevent those who have these diseases from carelessly spreading them. The enforcement of these laws is one of the most important duties of the Bureau of Health in Philadelphia. There are

employed for this purpose a chief medical inspector and fifty-one assistant physicians, besides a number of other persons who do disinfecting, clerical work, give consultation, etc. In spite of these laws and officers, in a recent year over 32,000 cases of communicable diseases were reported to the Bureau of Health. It is estimated that this is only one-third of the actual number of cases, because many of the less serious ones did not receive medical attention.

Every physician who is called to attend a patient having a contagious disease is required to report it at once to the Bureau of Health. An inspector is sent immediately to the house in order to see that proper care is being taken to prevent the spread of the disease to other members of the family or to outsiders. To accomplish the latter a warning sign is placed on the front door, the yellow sign indicating the more serious diseases, as smallpox, scarlet fever, or diphtheria, while the white sign indicates the minor communicable diseases, such as measles, chickenpox, mumps, etc. When the doctor's services are no longer required he again notifies the Bureau of Health, and upon receipt of this notice the inspector returns, makes sure that the danger of infection is over, and removes the sign.

Various methods are used to control and prevent the different diseases. Vaccination is the most valuable method of prevention. Philadelphia is a port city, and ships are constantly coming here from all parts of the world. Many cases of the dreaded smallpox have thus been brought to our city. When a case breaks out it is usual to vaccinate all persons who have been exposed. As many as a thousand people in a small neighborhood

have thus been vaccinated within twelve hours. The extent of these preventable diseases is a very good indication of the quality of the health work which a city does.

Contagious diseases concern not only local governments, but state and national as well. Because of the ease of travel and communication epidemics spread rapidly from place to place if proper measures are not taken to stamp them out when they appear. Therefore the state government has power to step in and administer the law where such action seems to be necessary. Every cause of contagious disease is reported to the state government, and each week a report of the number of cases and of deaths from each disease goes to the public health service of the national government. When an epidemic is present in one state, the neighboring states sometimes establish a quarantine and refuse to allow people from the infected state to come within their borders.

The national government sees to it that contagious diseases shall not be imported from foreign countries. At each port there is a station with a medical corps which examines every person on every ship which arrives. Persons who carry diseases are detained until they no longer menace others, or are sent back to the countries from which they came.

We can readily understand that if the city authorities are to see to it that the community is protected as far as is possible from these diseases, they must be able to tell accurately whether sick people actually have them or not. One of the special means that it has for this purpose is the bacteriological laboratory. Here examinations are made and reports are sent to the medical

inspectors, who are thus assisted in making diagnoses. This kind of service is also furnished free to all the physicians of the city. When epidemics break out careful studies are made to locate the source and thus prevent this source from causing more sickness.



(Courtesy of the Bureau of Health)

OPEN-AIR TREATMENT OF WHOOPING COUGH

Scene at the Philadelphia Hospital for Contagious Diseases.

Besides the laboratory, the city also has at Second and Luzerne Streets a special hospital for the treatment of contagious diseases known as the Municipal Hospital for Contagious Diseases. People used to be very much afraid of contagious disease hospitals, particularly those for the care of smallpox patients, which were usually called "pest-houses." But now that fear is disappearing; and as the hospitals are giving better and better

care, people are coming to see that they and their families are far better protected by hospital treatment than when such diseases are cared for at home.

Sickness and Hospitals.—In Philade'phia there are many private and semi-public hospitals. It is the custom for the Pennsylvania Legislature to appropriate



(Courtesy of the Bureau of Health)

CORRECTING VISION OF SCHOOL CHILDREN AT THE EYE DISPENSARY

sums of money of varying sizes to some of the private hospitals throughout the state. In return for these public funds the hospitals are expected to give a certain amount of free service to the poor. In addition to these state-aided hospitals, and the Contagious Disease Hospital, the city has at Thirty-fourth and Pine Streets the large Philadelphia General Hospital with 2,000 beds. As this hospital is administered under the Bureau of Charities, it is discussed in the chapter on charities.

Correction of Defects —We have spoken about correct-

ing physical defects which appear in human beings. It is possible that if we knew how to take perfect care of ourselves many defects which now appear could be avoided. We know that care of the teeth prevents decay,



(Courtesy of the Bureau of Health)

SCHOOL MEDICAL INSPECTION

Every school child receives a thorough physical examination. All defects are noted and parents are requested to have them corrected.

and that care of eyes prevents many eye disorders. But there remain many defects, the causes of which are not known but for which remedies have been found. Adenoids in the throat, enlarged tonsils, polypus in the nose, and numerous other growths are of such a nature. These defects often lead to serious diseases, which in turn may

cause death or permanent disability. It is therefore wise to have these defects corrected promptly.

To correct these defects the city provides medical inspection of its school children. The physicians employed by the city examine each child, and report to the parents any need of medical attention. A regular corps of school medical inspectors performs this service for the public schools, while the medical inspectors in charge of contagious diseases look after the parochial and private schools. To the children who cannot afford the private dentist or oculist the city furnishes free dental and eye treatment. Several thousand pairs of spectacles are furnished free each year to children whose parents are unable to pay for them. Medical inspection of school children is also of great importance in detecting contagious diseases and preventing the exposure of the pupils to them.

Health Education; Child Hygiene.—People who were watching the health conditions of the city very carefully some years ago noticed that a large number of the deaths reported were of small children—babies under one year of age. From 150 to 200 babies out of every 1,000 born, died during their first year of life. This, it was felt, was a condition that could and should be changed. So a campaign was started to “save babies.” It was known that many babies died because they were fed milk which contained germs of certain diseases. Accordingly, educational campaigns such as the Milk Show and the various baby-saving exhibits were held, and a large number of mothers were taught how to prepare and take care of the baby’s milk in order to keep it as free as possible from disease germs. In cases of the illness of

babies in certain districts the city gave ice and pure milk to the mothers. As was mentioned above, in 1914 the milk supply was required to be pasteurized.

It had also been observed that many mothers did not know how to take care of the baby's health in other ways. So the city decided, after some experiments, to teach mothers what they should know. In 1910 a chief nurse and eight assistants were employed. Since about 40,000 babies are born in the city each year, it was evident that such a small number of nurses could not instruct all of the mothers. Therefore their work had to be confined to a few wards, and in these they worked diligently. They visited the homes and taught the mothers how to keep their babies well. In 1915 the number of nurses was increased, until now the city has a much larger number, though there are not yet enough to cover the entire city. When the authorities receive the report of a birth from a section which has a nurse, the nurse goes to the house whether there is any reason to believe she is especially needed or not. If everything seems all right she makes no more visits; if she is needed she does whatever is necessary to instruct and help the mother. Already the number of babies that die is rapidly decreasing. It is hoped that before very long every baby in the city will receive the kindly attention by which the community seeks to start the little life out on its journey with a fund of good health.

Besides this education of mothers in the care of babies, the Health Department is trying to teach all citizens how to take care of themselves and to keep from being sick. Each week the Director of Health and Charities sends to the newspapers a short article on some timely

topic. Citizens should heed these warnings and help to improve the general health of the community.

Lately public health departments have seen that one of the big enemies to public health is the use of alcohol. It causes sickness, misery, and poverty, both to those who use it directly and to those who are dependent upon them. Many states have put alcohol in the class of poisons and habit-forming drugs and prohibit the manufacture and sale of them within the state. In 1917 Congress passed an amendment to the Constitution prohibiting the manufacture and sale of alcoholic drinks as beverages. This will become a part of the Constitution when it is approved by the legislatures of three-fourths of the states. As soon as citizens become educated to the harm which alcohol does, we may expect to see prohibition in Pennsylvania whether or not the amendment to the Constitution is passed.

Vital Statistics.—In 1904 a new law was passed which required that all births and deaths in the State of Pennsylvania be registered. It is now the duty of the attending physician to make out and file the birth certificate. In the case of deaths the physician fills out the death certificate, which he gives to the undertaker. Before the body can be buried or shipped out of the county the undertaker must take the death certificate to City Hall and get, in return for it, a burial or shipping permit. It is the duty of the Division of Vital Statistics of the Bureau of Health to count all these documents and the facts recorded on them. In this way we can find out how many people have died in a week or a month or a year, what diseases caused their deaths, the age at which they died, and many other facts. Certain facts

about the births are also tabulated, as we call this counting process.

The United States Government has taken the leadership in seeing that the system of reporting and tabulating shall be uniform and that the resulting statistics shall, therefore, be comparable. In this way we can know just exactly how much healthier or unhealthier our city is than other cities, how the wards compare with one another, how babies of Italian mothers survive in comparison with those of American, or Negro, or Russian mothers. Such facts as these are among the most useful tools that the official who is charged with improving health conditions can have. Indeed, without them he can neither know what is needed nor what he has accomplished. The United States Government also tabulates and publishes statistics on population every ten years, and recently began to get out statistics each year upon births and deaths in our country.

Department of Public Health and Charities.—By act of Assembly of April 8, 1903, the care of the public health was given to a newly created department, that of Public Health and Charities. This department has control of the public health, charities, almshouses, hospitals (including the Municipal Hospital for Contagious Diseases), and all other similar institutions under the government of the city. The department is in charge of a director, appointed by the Mayor.

The work of the department is divided between two bureaus, that of Health and that of Charities. It is with the work of the former that we are concerned in this chapter. The chief of the Bureau of Health is also the president of the local Board of Health, which is now

composed of three members appointed by the Mayor. The board advises and plans while the bureau carries out its measures through the various divisions, the work of which has been described above.

State Department of Labor and Industry.—A large proportion of Philadelphians spend the greater part of their day in shops and factories. To secure safe and sanitary working places for them with plenty of light and air, so that their health may not be affected, is the object of many state laws. These laws, which are enforced by the inspectors of the Department of Labor and Industry at Harrisburg, will be described in Chapter XII.

Conclusion.—Up to this point we have been speaking of what the community is doing to make Philadelphia a more healthful place in which to live. We are fond of saying that public health is purchasable, and that the more a city spends effectively for this purpose the healthier its people will be. This is undoubtedly true. But we should not forget that in this, as in many other things, money will not do everything. In order for our city health authorities to do their best work they must have the encouragement, support, and cheerful coöperation of the citizens. Very often it is hard to comply with the laws, but unless these laws are enforced impartially and strictly, innocent persons may suffer.

CHAPTER III

THE WATER SUPPLY

A long time ago, when Philadelphia was a small town, every family had to depend upon a well for water. Pictures still exist showing pumps standing in Market and Chestnut Streets. It was very inconvenient, as we



(Courtesy of the Bureau of Water)

OLD FAIRMOUNT WATER WORKS

may imagine, to have to go into the yard or street and fill a heavy pail every time that one had use for water. Besides the inconvenience, when the town grew into a city, well water became dangerous to health. This was because the presence of so many people caused a large amount of waste water, and as this water passed into the

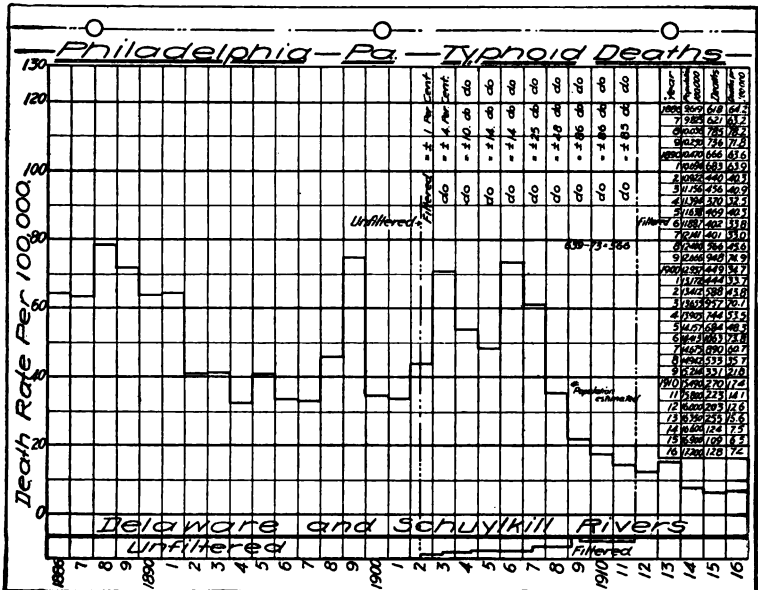
ground it made the well water impure. Impure water is one of the chief causes of disease, especially of typhoid fever. Soon after the Revolution the problem of supplying the people with sufficient pure water to meet the ever increasing demands began to trouble the city officers.

Our first city water system consisted of a pumping station which pumped water from the Schuylkill River to a reservoir on the present site of the City Hall. Philadelphia's next water works were in Fairmount Park, near the Green Street entrance. The old buildings with their rows of gray columns are still standing on the edge of the river. The city now maintains an aquarium there. The districts outside of the original city were served by separate plants, some built by the district governments, some by private companies. After the consolidation of the city, in 1854, Philadelphia came into possession of the water works which were publicly owned and later the city purchased from the companies the private plants. When the filtration system was started in 1900, the city had several pumping stations, some on the Schuylkill, and some on the Delaware.

Need of Filtration.—As Philadelphia grew, other towns above us on the two rivers were growing and sending larger and larger amounts of sewage and factory waste into the rivers from which we drew our water. If we look at the map of Pennsylvania we shall see that Burlington, Bristol, and Trenton are all above us on the Delaware, while Norristown, Bridgeport, Pottstown, Phoenixville, and Reading are above us on the Schuylkill. Of course some of the filth from those towns and cities sinks to the bottom of the river or is purified by the action of the air, but enough remains to make the water

unpleasant and unsafe. Even a portion of our own sewage backs up the rivers to the place where we draw our water.

The subject of purifying Philadelphia's water supply had been under consideration since 1858, but it was not



(Courtesy of the Bureau of Water)

DIAGRAM SHOWING DEATH RATE FROM TYPHOID FROM 1886 TO 1916

until 1899 that any agreement was reached. During the last twenty years of the nineteenth century the situation had been very serious. Philadelphia had the unenviable reputation of having a higher death rate from typhoid fever than any other large city in the United States. The water was often so filthy that a coating of mud would settle in the bottom of a basin or bath tub. Those who could afford to do so always bought their drinking

water by the bottle from water dealers, who thrive on the city's distress. The poor either boiled the muddy water or ran the risk of dying of typhoid fever. Acting on the recommendations of a committee which had studied the problem of water supply, Councils in January, 1900, authorized the construction of filtration plants within the city limits. Down to the present time more than \$67,000,000 have been spent on this work.

The Filtration System.—It took nine years to complete our five filtration plants, but as each one was finished the effect upon the death rate from typhoid fever was noted at once. The rates for the city as a whole during the years before and after the introduction of filtered water are sufficient proof of the value of the system.

Number of persons dying of typhoid fever in one hundred thousand of the population.

(From the report of the Bureau of Health for 1916.)

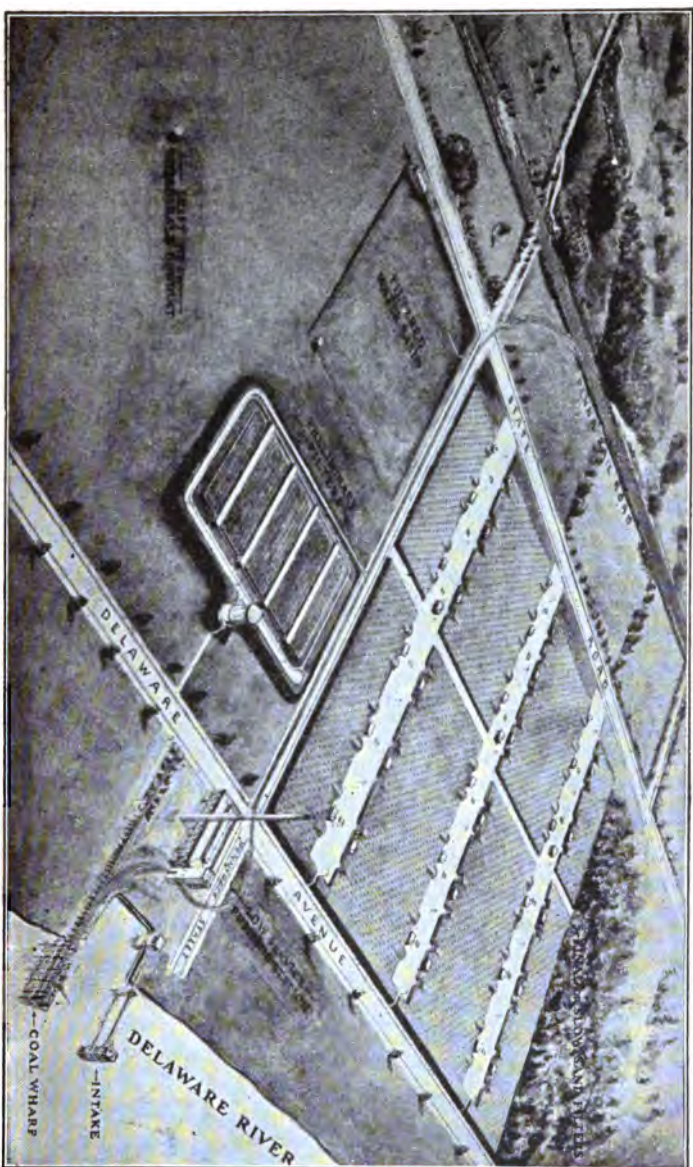
1895.....	40.0	1906.....	73.3
1896.....	33.6	1907.....	60.3
1897.....	32.8	1908.....	35.5
1898.....	51.3	1909.....	21.7
1899.....	74.6	1910.....	17.5
1900.....	34.6	1911.....	14.5
1901.....	33.6	1912.....	12.7
1902.....	43.6	1913.....	15.7
1903.....	69.7	1914.....	7.4
1904.....	53.2	1915.....	6.5
1905.....	48.0	1916.....	7.5

The fluctuations were partly due to other causes, but the general decrease of the rate is clearly due to the improvement of the water.

These five filtration plants clean more than 300,000,000 gallons of water every day. If you can imagine a huge

harmful bacteria. It is only after a severe storm which has stirred up the rivers that we are troubled with cloudy water. At the laboratories of the Bureau of Water, expert chemists test the water every day to see that it is good. To clean so much water in a day is a great task, and it is very interesting to see how the work is done. If we look at the little map of the filtration system we shall see that we have four plants on the Schuylkill River called the Upper Roxborough, Lower Roxborough, Belmont, and Queen Lane filtration plants. Each one is located on the high land above the river and is supplied with water by a pumping station on the bank below. The first two are fed by the same pumping station. The two Roxborough plants furnish water to Roxborough, Manayunk, Germantown, and Chestnut Hill; the Belmont plant supplies West Philadelphia, and the Queen Lane plant supplies Tioga and the surrounding districts. All of these together produce only one-third of the water for Philadelphia. The main part of Philadelphia receives its water from the gigantic Torresdale filtration plant on the Delaware River to the north, the largest one of its kind in the world. This plant alone furnishes our city with as much water as is supplied to the entire city of London.

The Torresdale Plant.—Let us pay a visit to Torresdale and see how the work is done. As we approach the river we see a group of yellow brick buildings with tall chimneys close to the bank, and next to them a large green field dotted over with little brick houses set in even rows. The buildings are the offices and engine rooms and the little houses are the entrances to the sand filter beds, of which there are sixty-five. Let us



THE TORRESDALE FILTRATION PLANT

(Courtesy of the Bureau of Water)

first go down to the river bank to see where the water comes from. Half a mile up the river is a great reservoir which is called the "sedimentation basin," because the water is allowed to stand there to settle. It is on a level with the river and the dirty water flows into the sedimentation basin through a screen. While the water stands, most of the mud sinks to the bottom of the basin. The somewhat clearer water is drawn off from the top of the basin, after it has stood for twelve hours, and is pumped up the hill to the filter beds. In the large building on the river's edge are the great engines which do this work.

The water is passed on through a conduit eleven feet in diameter to buildings called "preliminary filters," where it goes through tanks containing gravel and sand. There are one hundred and twenty of these filters. The filters strain off still more of the mud. From this the pipes carry the water to one of the many "slow sand filters," where the final clearing is done. These filters are like vaulted cellars, built under the ground, and having for their entrances the little yellow brick houses which we saw as we approached the place. At the bottom of these filters is a layer of broken stone covered with gravel, and on top of the gravel a thick layer of fine brown sand. The water from the preliminary filter is allowed to run in slowly and sink down through the layers of sand, gravel, and broken stone until it passes out through pipes at the bottom. It must go slowly, so that all of the dirt and most of the bacteria may be removed. The pipes from the slow filters run to "the clear water basin," where the water is kept under cover until it passes out to the homes of the people.

The Torresdale plant, unlike the others, has two pumping stations. This is made necessary by the fact that the filter beds are near the level of the river. After the water has been filtered it has to be pumped up to a higher level, so that it will flow into the buildings of the city. The pumping station for the filtered water is on the river bank a short distance below at Lardner's Point.



(Courtesy of the Bureau of Water)

WASHING THE SAND AT THE TORRESDALE FILTERS

The district served by the Torresdale plant has the Oak Lane reservoir at Fifth Street and Cheltenham Avenue for a reserve supply. The amount of water used is irregular, and sometimes water is needed faster than the pumps supply it. In case of extra need, 70,000,000 gallons stored there may be drawn upon.

The removal of the bacteria from the water is hard to understand. We know that bacteria are very small—

so small that we can see them only through a very strong microscope—and that some of them are very dangerous, causing diseases like typhoid fever. Passing the water through the sand could not strain out the bacteria as it does the particles of mud, because the bacteria are too small. What is it then that happens in the filter to remove them from the water? It has been discovered that a layer of good bacteria forms on the surface of the sand like a coating of jelly, after the filter has been running for two or three days. These good bacteria kill the bad ones as they come through and so purify the water from disease germs. The action of the good bacteria is what makes the sand filter so successful in reducing the danger from typhoid and other diseases.

High Service Stations.—Certain portions of the city are so high above the filtration plants that the ordinary water service will not reach them. To meet this need there are four “high service stations,” which pump filtered water into standpipes, thus securing enough elevation to supply these districts. The George’s Hill Station serves Overbrook, the Wentz Farm Station serves Frankford, and the Mt. Airy and Roxborough Stations serve the districts of the same name.

A Great Industrial Plant.—As it stands to-day, Philadelphia’s water system represents an investment by the city of more than \$67,000,000. In addition to being owned by the city, this valuable industrial plant is operated by the city. It is an example of efficient and successful “municipal ownership and operation” of a public utility. The operation of this great plant necessitates the steady employment of more than 2,000 men, the payment of more than \$1,300,000 a year for salaries

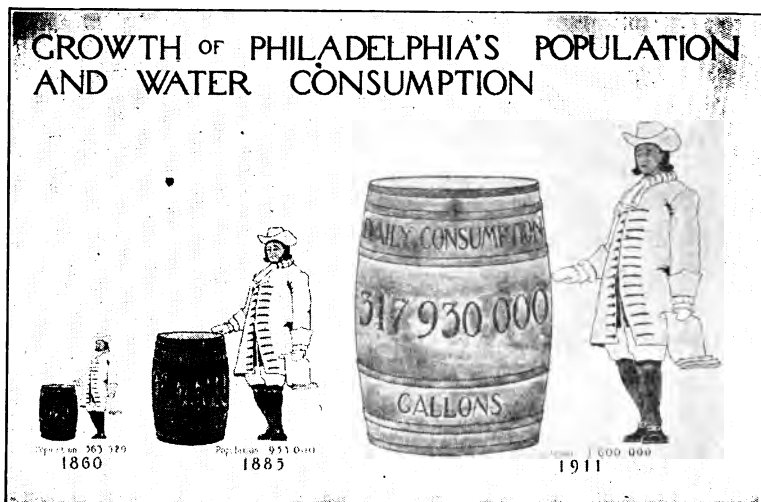
and wages, and the payment of about \$1,000,000 a year for other expenses, exclusive of interest on borrowed money. The branch of the city government which operates and manages the water system is known as the Bureau of Water, one of the several bureaus comprising the Department of Public Works; and the official responsible for the operation and management of the system is known as the Chief of the Bureau of Water and is subordinate to the Director of the Department of Public Works, who is appointed by the Mayor.

In accordance with the most approved ideas concerning the operation of a business enterprise by a government, the aim has been to make the water system self-supporting—that is, to collect from the consumers of the water at least enough money to cover the expense of collecting, purifying, and distributing the water, and to cover interest on such of the cost of the system as has not been paid for. Notwithstanding the smallness of the charges which the city makes for the water which it supplies, and notwithstanding the great wastage of water by the water consumers, Philadelphia's water system supports itself and pays a profit.

At present the city charges for its water on several plans. Some consumers are charged flat rates—that is, they are charged so much per year according to the number and kinds of water-consuming fixtures on their premises, upon the uses to which the water is put, or upon the size of the connection to the water main. Others are charged meter rates—that is, they are charged according to the quantity of water delivered to their premises through water meters, the rates being graded according to the sizes of the connections to the water

mains or according to the uses to which the water is put.

Owing to the great wastage of water by many of those who pay flat rates—the annual water bill being the same no matter how much water they use or waste—and



GROWTH OF PHILADELPHIA'S POPULATION AND WATER CONSUMPTION

In 1917 the population of the city was estimated at 1,733,000, but the daily consumption of water had decreased to 315,910,000 gallons, or 182 gallons daily per capita. This decrease in consumption was attributed to the increased use of water meters.

because charging for water according to the quantity which a consumer draws through his premises is fairest to all, the city is requiring new consumers and certain classes of old consumers to adopt the meter plan and is encouraging others to do likewise, with the result that the flat rate plans are rapidly being superseded by the meter plan.

Fire Protection.—There is a close connection between the water supply and our protection from fire. The

firemen are dependent upon the Bureau of Water to give them enough water to fight fires. Most of the fireplugs which you see on the streets are connected with the regular mains of filtered water. In the portion of the city near the Delaware River, where the largest mills and warehouses are located, there is a special water supply called the "high-pressure system." A pumping station at Race Street and Delaware Avenue pumps water directly from the river. Another at Seventh Street and Lehigh Avenue takes it from the old Kensington reservoir, filled from the Torresdale filtration plant. The pumps are worked by high-power gas engines which can be started very quickly and which send great streams of water with tremendous force. There are special fire-plugs in these districts for the high-pressure system. Hose connected with these will send streams of water into the tenth story of a building. (See chapter on fire fighting and fire prevention.)

Water Waste.—The great problem which is facing the Bureau of Water continually is how to provide enough water to meet the demands of the city. The population and industries are both growing very rapidly. Recently the situation became so acute that the pressure was insufficient in several sections of the city. Additional supplies are especially needed in South Philadelphia. This lack of water was made one of the excuses for the dirty condition of the streets, since the chief of the water bureau was obliged to forbid, at times, the use of water for flushing the streets. There was fear of an insufficient supply for fire fighting.

The daily output of more than 300,000,000 gallons would seem to be enough when you consider that it

means a per capita supply of almost 200 gallons. New York's per capita supply is 103 gallons, Boston's 157, and Cleveland's 104.

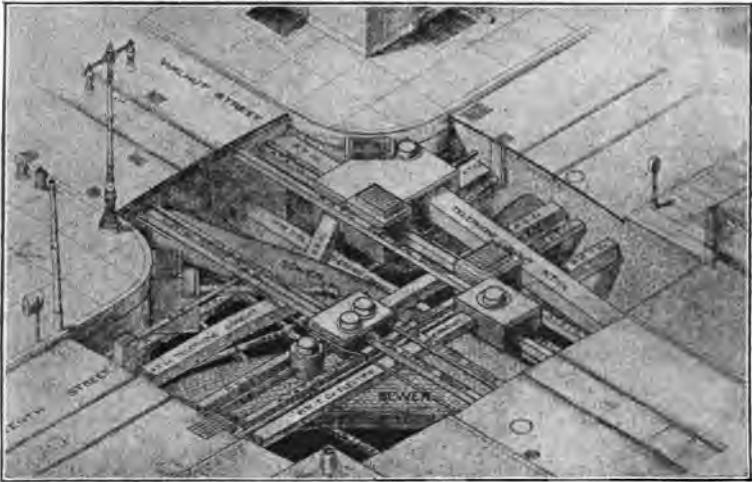
The Chief of the Bureau of Water claims that our shortage is partly due to waste. An investigation undertaken by the bureau in 1913 showed that there were leaking faucets and hydrants everywhere. One institution alone was found to be wasting 1,000,000 gallons every day. It seems rather foolish for the city to spend so much money to clean water which runs right into the sewers. It is not good business.

What remedies are proposed to prevent our having to spend more millions for more filtration plants to keep up with the increasing demands for water? The first and simplest thing would be to oblige the owner of every house and business building to install a meter and pay by the gallon for the water he uses. That would make them more economical. A beginning has been made, as stated above, by requiring certain classes of consumers to install meters. Many householders and business men have done so voluntarily and thus helped to save water. [A second remedy would be to educate the people of Philadelphia to realize that it is their money which is being wasted when they let the faucets and hydrants run, and get everybody to help to save the property of the whole community. This is one of the matters in which children can help their city directly.]

Water Supply and Sewage.—The more than 300,000,000 gallons per day pumped and filtered flows through the pipes and faucets of the city's buildings, out again through the waste pipes and sewers, and back into the rivers. The volume of sewage is increased by the rain which

falls in the streets and runs off through the sewer inlets at the corners. To dispose of this enormous quantity of dirty water makes another problem for the community.

The waste pipes under the street are made of terra cotta, brick, or concrete, and empty into large sewers. The volume of waste is so great that these sewers are



(Courtesy of the Department of City Transit)

UNDERGROUND STRUCTURES AT TENTH AND WALNUT STREETS

Notice the high-pressure water main below the sewer near the bottom of the picture.

often like tunnels, and are so large that men can walk through some of them standing erect. One of the newest, the Wingohocking Creek sewer, is nineteen feet in diameter, large enough to drive a horse and wagon through. The main sewers empty into either Frankford Creek, the Delaware, or the Schuylkill River. Their mouths are supposed to be far enough down the river so as not to interfere with the intake of water for the city's

water works. As a matter of fact, a portion of our sewage does back up so far as to affect the source of our water supply. The planning and locating of the sewers are done by the Bureau of Surveys, of the Department of Public Works, but they are built by contractors under direction and inspection by that bureau.

When towns were small and population was scanty, there was little objection to sending the sewage into



(Courtesy of the Bureau of Surveys)

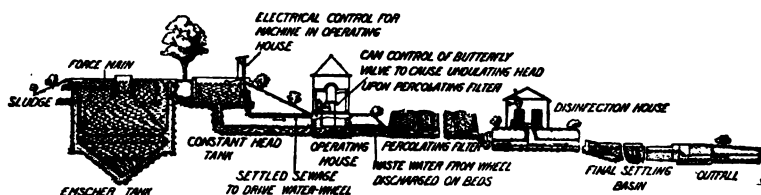
TYPICAL CITY SEWER OUTLET

the rivers. The action of the friendly bacteria soon purified it. But the more dense the population, the more dangerous it becomes. We have to clean from the river water the refuse of the towns above us on the river banks, as has been explained. We in turn pollute the river which flows on down to Chester and Wilmington.

The Chief of the Bureau of Surveys estimated in 1915 that 400,000,000 gallons of sewage daily are emptied into the Delaware River. The river water carries not only filth but disease germs. It menaces health, is unpleasant to look at and to smell, and deposits slime upon the bottom, thus helping to fill up the channel. The United States Government and the city government are constantly working to keep the channel clear of mud so that large sea-going vessels may not have difficulty in coming up to the wharves of Philadelphia. It is poor policy to add

to the mud which the government must remove. In view of these facts, the State Legislature in 1905 passed a law forbidding any town or city to discharge sewage into the watercourses of the state. Every city must file plans for sewers and sewage disposal with the Department of Health at Harrisburg.

Philadelphia already has one such sewage disposal plant on the Pennypack Creek sewer in the northeastern part of the city, which cares for 2,000,000 gallons daily



(Courtesy of the Bureau of Surveys)

DIAGRAM OF THE PENNYPACK CREEK SEWAGE DISPOSAL PLANT

The sludge or solid matter settles to the bottom of the Emscher tank. The water then goes on to the percolating or trickling filter shown in another picture. A chemical which still further purifies the water is added at the Disinfection House. The water emerges practically pure.

and so prevents pollution of the Delaware near the Torresdale water works. At the Pennypack Creek plant the process is somewhat like the filtration of the city's water described above. The sewage first enters large sedimentation tanks. It remains there for two hours while the solid materials are settling to the bottom. The water then flows off from the tanks, and is passed through a "trickling filter," where it falls as a spray on broken stone thus being aerated and subjected to the action of friendly bacteria. Then it is disinfected to destroy disease germs and returned to the river. The superintendent of the plant claims that the water is

perfectly clean. The solids are taken from the tanks, dried and used for fertilizers.

The Bureau of Surveys conducted a study of the problem for over ten years, examining the methods in use in cities abroad as well as in the United States. In 1915, they made a report to Councils which has been approved by the state and is Philadelphia's plan for the future.



(Courtesy of the Bureau of Surveys)

TRICKLING FILTER IN OPERATION

The sewage gushes up through these nozzles and trickles over a bed of crushed stones. Exposure to the sun and air renders it harmless and it may then be turned into the river.

The report advocated the construction of three great sewage disposal plants: one on the Delaware River below Bridesburg, one on the Delaware in the lower part of the city near Greenwich Point, the third in the southern part of West Philadelphia near the mouth of the Schuylkill River on the "Cannon Ball Farm." The plants were to be completed by 1950 and the estimated cost by that time was \$34,000,000. That cost includes not only construction of the plants but purchase of the

sites and the building of very large collecting sewers to conduct the sewage to the disposal centers. It will cost \$500,000 a year to maintain the system after it is built.

Citizens have it in their power to decrease this expense in the same way that they may decrease the cost of filtration of water. Philadelphia wastes much of its water and this waste not only adds to the cost of the Bureau of Water but increases the sewage to be disposed of.

Conclusion.—We have seen how the people of Philadelphia have secured a water supply from the days of wells and pumps to the present time, yet the first problem is still with us: how to secure enough water for the rapidly growing city. Not only is the population increasing but the uses for water are more every year. One great manufacturing plant to-day demands more than the whole city in the days of the first water works in Center Square. Modern standards of living demand water in every house and at least one bathroom to a family. Modern methods of street cleaning require that the streets should be flushed at least once a week. Let us hope that the problem of a sufficient water supply will soon be solved.

CHAPTER IV

STREET CLEANING AND WASTE DISPOSAL

The chapter on health shows how pure air is necessary to preserve the health of the community. Yet we have often walked along the street on a windy day when dust, swept up by the wind and whirled along in clouds, filled our eyes, nose, and mouth. The more we had studied about health matters the less we liked this. We knew that the bacteria and microbes which carry disease were mixed in with that dust; each particle was a "germ airplane."

Who Litters the Streets?—Why do we have so much dirt in the streets? A walk along Broad Street will tell us. As we approach Arch Street we find the workmen busy paving it with wooden blocks. Piles of sand are heaped beside the street for use in the work. The wind catches the sand and spreads a little of it on the asphalted surface of the street. At Cherry Street we see a new automobile palace in process of erection; bricks are piled beside the street, bags of cement, packing boxes with excelsior dropping out of them, and ashes and sand for making a pavement are scattered around.

In the next block a boy is sweeping out a shop. He sweeps the dirt across the sidewalk and deposits dust, shavings, and papers in the gutter for the wind to scatter. A contractor's wagon passes with a load of sand. The driver has filled it to the top, and as it jolts along it leaves a fine trail of sand behind it.

As we pass Mount Vernon Street a gust of wind brings out pieces of newspaper, wall paper, and a rag or two. Where does it come from? It is the day for collection of ashes and rubbish. In front of each house is a motley collection of baskets, boxes, and cans. Some are good strong galvanized iron cans, others are frail peach baskets lined with newspapers and leaking ashes at every opening.



(Courtesy of the Bureau of Street Cleaning)

MOTOR-DRIVEN ASH CART

On one corner there is a very shabby man with some big bags. He pokes a long hook into bundles and tears them all to pieces trying to find some salable rubbish. He puts the scraps into his bag and moves on to tear up the contents of another box or can.

A little later the city rubbish and ash collectors pass. The rubbish collectors have large wagons with high sides so that they may carry a large amount of material

which is light and bulky. They take the contents of the boxes and bundles but leave the scattered fragments behind.

On certain days, also, the garbage pails will be out waiting for the collectors. Unless the cans are covered, the neighborhood dogs go through the contents and scatter them on the pavement. The garbage collectors are likely to be careless and leave remnants of food on the sidewalk. If the wagons are overfilled they add to the general dirt of the street as they pass along. Every residence street, unless the houses open at the rear on a small street or alley, is mussed up for one or two days in the week by setting out waste for collection. If by accident the collectors do not come on the appointed day, the number of days of dirt and muss is increased.

The Laws.—It is easy to see where all the dirt which we notice in the street comes from. One naturally asks why things are not better done. As a matter of fact, the city and state governments have been concerned about these matters and have passed laws and ordinances to prevent the littering of the streets. In 1917 the city government issued a card of warning to citizens, giving the brief statement of the laws as follows:

**TO AVOID ERROR—KNOW THE LAW
TO AVOID THE PENALTY—OBEY THE LAW**

Separation of Ashes and Rubbish

Ordinance of City Councils, July 16, 1909: Forbids any person or persons "to place upon the streets or footways in receptacles containing ashes, sweepings or other refuse, any waste paper, card board or box board of any character or description."

Penalty: For each violation of this law, five (5) dollars.

Use of Proper Ash, Rubbish, and Garbage Receptacles

Act of State Assembly, April 11, 1915: Requires that "the occupant or tenant of every dwelling, and of each apartment in a two-family house, the lessee or conductor of every rooming house, and the conductor of every tenement-house, shall provide for each apartment under his supervision a suitable non-absorbent, non-leakable, covered receptacle for garbage, and a receptacle of approved kind for ashes. All occupants or tenants of buildings of the foregoing classes shall securely bundle all rubbish, waste paper and like refuse in such manner as to prevent it from causing a nuisance upon the property or upon the street when the collectors are taking it away."

Under the authority of this law, the **Resolution of the City Board of Health, May 19, 1916:** Requires that

Ash Receptacles: Shall be substantial, tight containers, preferably of metal, and should not have a capacity of over 5 cubic feet; and they should not be filled higher than 3 inches below the top of the receptacles.

Rubbish, Waste Paper and Like Refuse: Shall be securely bundled or placed in tight receptacles in such a manner as to prevent them from causing a nuisance upon the property or upon the street.

Garbage Receptacles: Shall be of metal, tightly made, and shall be covered with close-fitting covers.

Penalty: For the first violation of this law, five (5) to fifty (50) dollars. For the second violation of this law, twenty-five (25) to two hundred (200) dollars or sixty (60) days or less imprisonment or both.

Scavengers and Rag Pickers

Act of State Assembly, April 20, 1905: Forbids any person or persons, "to interfere with, scatter or disturb the contents of any receptacle or receptacles containing ashes, garbage, household waste, or rubbish, which shall be placed on any street or sidewalk for the collection of the contents thereof."

Penalty: For each violation of this law, ten (10) dollars.

Store Sweepings

Ordinance of City Councils, March 7, 1882: Forbids any person or persons to "place any sweepings or other dirt or rubbish from any store or other building, upon the streets or the footways except in proper receptacles."

Penalty: For each violation of this law, twenty (20) dollars.

Throwing or Sweeping of Rubbish or Anything Else Upon the Streets

Act of State Assembly, April 20, 1905: Forbids any person or persons "to throw waste paper, sweepings, ashes, household waste, nails or rubbish of any kind into any street."

Penalty: For each violation of this law, ten (10) dollars.

Distribution of Advertising Literature

Ordinance of March 31, 1900: Forbids any person or persons "to cast, or place in the streets or on the footways or into the vestibules or yards, or upon the porches of any dwellings or other buildings, any papers, advertisements, handbills, circulars or waste paper."

Penalty: For each violation of this law, twenty (20) dollars.

Overloading of Wagons or Other Vehicles

Ordinance of City Councils, March 7, 1882: Forbids any person or persons, "to let fall, spill, or dump any ashes, dirt, rubbish, or garbage from any cart, wagon, or vehicle upon the public highways of the city."

Penalty: For each violation of this law, twenty (20) dollars.

In addition to these requirements, anyone who wishes to put bricks, sand, or other building materials in the streets must secure a permit from the Bureau of Highways. For this privilege a charge is made. The bureau has been very generous with its permits, granting 12,000 in the year 1917 alone. Building material is piled along some streets for weeks at a time. Recently an ordinance has been passed requiring the applicant for a permit to pay according to the space used and the length of time the material is left in the street. This will undoubtedly bring about great improvement.

The reason for most of these regulations is plain. It may not be so clear, however, why the different kinds of waste material must be put into separate receptacles. Garbage must be kept by itself because the contractor who removes it takes it to a reduction plant to be made into oils and fertilizer. The ashes are needed to fill in lowlands and marshes. For such a purpose clean ashes are preferable. The rubbish is taken to separate dumps. At the dumps an effort has been made to have the rubbish sorted and various articles picked out—such as old felt hats, rubber, iron, and tin cans, which have a value

because they can be sold; but in Philadelphia, at present, this is left to scavengers.

Why the Laws Are Not Obeyed.—It is perfectly evident that our streets would be kept clean if the laws were obeyed. Some people do not care; others make money by obstructing the streets. Our policemen can easily discover most of the offenders, and our courts can punish them, but public opinion would not support the enforcement of the law. A writer in the *Public Ledger*, November 5, 1916, said that in New York in one year 5,951 people were arrested for littering the streets, and of these 4,759 were fined or imprisoned. Hardly any arrests are made in Philadelphia. We shall have clean streets as soon as we insist that the laws shall be obeyed.

Waste Disposal.—Instead of dumping the ashes and rubbish in low places, some cities have plants where everything that can be burned is used as fuel to furnish power for lighting the city. Minneapolis lights and heats a public hospital and the workhouse building by the burning of its refuse, and in addition lights over thirty-one miles of streets. Several other cities operate such plants. The power derived does not entirely pay the cost of disposal of the waste but reduces it considerably. The cost of running the Minneapolis plant is \$29,000 and the income received from it is \$12,000. Philadelphia paid in 1916, \$867,000 for the disposal of ashes, rubbish, and garbage. Even a portion of that would be worth saving.

Most of the garbage is hauled to the Schuylkill River, and dumped into barges which carry it down to the plant of the reduction company. A visit to this plant would show a large group of buildings close to the river

bank. At the water's edge is one of the barges from up the river. The unpleasant mass is being unloaded by a steam shovel that reaches down into the boat, seizes a ton or two at one bite and lifts it over the dock above a great funnel, where it drops the load. Apple peelings, bread, corn husks, meat scraps, and all the rest pass down the funnel into a moving trough which carries the mass into the upper stories of the building. As it moves upward boys pick out tin cans, bottles, and other objects which should not be put into garbage pails.

Climbing to the third story of the building, we see the next step in the process. There we find ourselves at the top of a row of enormous cylindrical iron tanks, two stories high and each of a capacity of several hundred gallons. From the moving trough of garbage each tank is filled, and the covers are then clamped down. Steam is turned on through pipes opening into the tanks, and the garbage is cooked from five to eight hours until it is reduced to a paste.

Down again we go to the first floor to see where the tanks are emptied. Through a funnel-shaped opening the cooked mass passes into horizontal cylinders where a piston-like arrangement presses out grease and liquid. The grease is refined by a gasoline process until it is clear and pure. In its different stages it is sold for commercial purposes. The presses are opened and the pressed material or "tankage" is carried on moving platforms to ovens where it is dried until it becomes a scorched brown powder. Boatloads of this material are sent South to be used as the basis of fertilizer.

The city paid the reduction company \$286,755 in 1914, \$323,588 in 1915, \$372,399 in 1916, and \$432,000 in 1917

for removing the garbage from the houses and disposing of it. The first bid for 1918 was \$605,266, but it was rejected as too large by the Director of Public Works. The contract was finally made for \$575,256. The work must be done and should be done well, for decaying garbage in a city is a menace to health. Tons of it accumulate every day, and if left it becomes a source of unpleasant odors, especially in the summer time, and is a breeding place for flies, which spread disease. The question which Philadelphians should consider is whether the work is being done economically and efficiently.

There are several reasons for the high cost of garbage removal here. The law requires that a contract for removing and disposing of the garbage for one year shall be awarded to the lowest bidder. In Philadelphia there is but one garbage disposal plant, therefore only one bidder, because outside contractors would not consider it worth while to build a plant for a one-year term. Sometimes, as in the fall of 1917, the bid is refused because the Director of Public Works thinks it is too high. When he does this he runs the risk of having no one to remove the garbage, but usually the company has anticipated this and is able to make a small reduction and get the contract. In 1913 the Director of Public Works tried to secure for the city through an act of the Legislature the power to make contracts for five years instead of one year and thus induce other garbage reduction companies to bid and secure better terms. But the friends of the old system were too strong, and the Legislature refused to submit such an amendment of the city charter to the voters.

Legislation is also needed to put the private collectors

of garbage out of business. Hundreds of these men go about gathering garbage to feed the pigs now maintained mainly on the outskirts of the city. They naturally take the best of the garbage and reduce the profit to the regular city contractor. The private collection of garbage also makes it hard to enforce the regulations imposed upon the city collectors because householders rarely know which are city and which are private collectors.

Experiments are being made in various cities with public ownership of plants for the disposal of garbage.



(Courtesy of the Bureau of Street Cleaning)
SPRINKLER AND MACHINE SWEEPERS

It is likely that honest and efficient business management will find a way to save a considerable portion of the half million dollars now paid for this service. It is clear that the city might save the profit now made by the contractor and

the value of the by-products derived from the garbage.

Street Cleaning.—It is evident that much of the dirt which collects in the streets could be prevented. The removal of the dirt is one of the largest items of expense in the city's accounts for the year.

Let us go back to Broad and Mount Vernon Streets, where we watched the collectors of ashes and rubbish at work. Mount Vernon Street is paved with asphalt at this point, so we shall observe the method of cleaning which is adapted to smooth pavements. First in order comes a sprinkler wetting down the dust. It is followed by a squeegee. This street-cleaning machine has a roller

covered with projecting bands or "fins" of rubber. The principle is the same as that of the rubber squeegees which are used in cleaning windows. As the horses draw it, the roller turns, and the dirt is scraped from the smooth surface of the street. The roller is placed diagonally between the wheels so that as it turns and scrapes the surface, the dirt is thrown to one side of the



(Courtesy of the Bureau of Street Cleaning)

SQUEEGEES AT WORK

street. After the squeegee comes a "gang" of men in white uniforms with brooms to sweep into piles the dirt left by the squeegee. Then follow men in brown uniforms, with shovels and wagons, who take up the piles. It is important that the whole group shall work together, because if the refuse is left in the street it will be scattered by the wind and traffic. The contract allows no longer than an hour before the dirt is removed.

Now if we go around into Sixteenth Street we shall

find the gang cleaning by the method required for a street paved with granite blocks. The surface is rough, so the squeegee could not clean the mud out of the cracks. It is therefore replaced by a machine broom which has a roller like the squeegee, but the rubber fins on it are replaced by brushes made from splints of wood.



(Courtesy of the Bureau of Street Cleaning)

HIGH-PRESSURE FLUSHER

While we are watching, a man in a gray uniform arrives on a bicycle and gives some orders to the workers. He is the gang superintendent whose duty it is to see that the work is done properly. Each workman and each wagon and piece of apparatus has a number, so that an inspector can report any delinquency or any need of repairs. Citizens, also, in reporting any failure in duty on the part of the street-cleaning force should always give

the number of the district and the number of the man who is criticized, as well as the day and hour if possible.

If we were watching a street-cleaning gang nearer the center of the city we should see different methods used. Some gangs are furnished with high-pressure motor flushers. These are like large motor sprinklers which give enough force to the water to flush the dirt from the streets into the gutters. They are generally followed by men who sweep the water into the sewers. Many narrow streets and alleys are cleaned by men with hand brooms and hand hose. In the region from Vine Street to Washington Avenue and east of Broad Street and also on Market Street, west to the river, it is required that the machine street cleaning shall be done at night, except in winter time. The object of this is to avoid interference with the heavy traffic in the daytime and annoyance to the crowds which throng these streets.

Everywhere throughout the city between the regular cleaning times you will see the "blockman" at work. According to the specifications for 1917, his outfit should consist of a can carrier on wheels, bags or cans, a scraper, a broom, a wrench to open the water plugs, a hand watering pot, and a shovel. It is his business to sweep up the refuse as fast as it collects, put it in a bag or can, and leave it at a specified spot for the man who comes around with a dirt cart. Each man is assigned to one or more blocks. The more crowded the section, the shorter the route given to him.

For the purpose of cleaning our more than 1,700 miles of streets and roads the city is divided into nine districts. The work in each district is carried on by a contractor

paid by the city. No contractor is allowed to have more than two districts. The arrangement is intended to secure better work and to keep several firms in the field so that it may not become a monopoly as in the case of the garbage disposal. Ostensibly the firms bidding against each other help to keep down the price; it is quite possible for one contractor to control several firms appearing under different names and so evade the law.

The Bureau of Street Cleaning issues specifications each year, giving full details of the work to be done by the contractors. These tell which streets must be cleaned every day, every other day, every week, etc. They also state the number of men of each classification for each district, and the kinds of apparatus to be used. Another important item is a statement of the fines to be paid by the contractor for failing to live up to the specifications.

The Bureau of Street Cleaning of the Department of Public Works prepares the specifications and supervises the work. Its inspectors go throughout the city and report to district offices any violations of the specifications which they find. The work is very hard to supervise because the operations are so many and varied and so widely scattered. It has been estimated that it would require one hundred and twenty men to do it thoroughly. The city affords only thirty-five.

The method of punishment by fines for failure to keep the terms of the contract does not work very well. Occasionally the Director of the Department of Public Works deducts from the monthly payments to the contractor considerable sums of money, but the contractor often

saves more money by omitting to do the work than he loses in fines.

These minute directions, the employment of inspectors and many other members of a Bureau of Street Cleaning, and the expenditure of two and one-half millions of dollars per year ought to give us clean streets. We could easily observe why the streets are littered; it is not so easy to decide why they are not cleaned. Yet it is true that the newspapers are full of complaints of the dirty streets, and one does not have to go far with open eyes to see that these complaints are well founded. The *Evening Ledger* said in an editorial, June 18, 1917: "The dirtiness of our streets has become a byword. Citizens take the condition for granted. If their children are stricken down by infantile paralysis or other diseases of which dirt is the carrier, they weep their tears and lay their flowers on the graves of the innocents, bewailing their evil fortune. Better might their consciences smite them and their tears beg pardon of the dead for their own negligence in having permitted the continuance of conditions which they knew, or ought to have known, were a constant invitation to death. We sympathize no more with communities which are visited by yellow fever or smallpox, for we know that only negligence permits either to get a hold. No more can sympathy be deserved by communities which in this day of scientific sanitation countenance highways of filth and accept as inevitable these breeding places and carriers of disease."

There are two ways of administering the cleaning of city streets. One is to have the city let the contract for the work to a private firm and then employ inspectors to see that the contractor does his work properly. The

other way is to have the work done by employees of the city under the direction of city officials. Our city uses the first method. Other cities consider the second more economical and efficient. Philadelphia stands alone among the twenty-five largest cities in having street cleaning done by contract.

New Methods in Street Cleaning.—There are certain new devices which are beginning to be seen in Philadelphia. Among these are motor-driven rubbish and ash wagons, motor squeegees and brushes, scrubbing machines, street rubbish cans, and vacuum cleaners. It has been the policy of the bureau to require in the specifications each year a larger number of motor-driven pieces of apparatus, so that the contractors might gradually replace those drawn by horses. In Cleveland it has been shown that an electric street flusher cleans a mile of street for seventy-five cents, while it costs \$4.50 to do the same with a horse-drawn flusher. In 1917 the contractors began to experiment with an automatic motor cleaner; it sprinkles, brushes up the dirt, and gathers it into a receptacle all in one process. It has been claimed that such a machine can clean as much pavement in one hour as a horse-drawn sweeper in six hours.

Paving.—There is a direct connection between paving and street cleaning—so direct that the two subjects are usually treated together. It is only smooth pavements which can be readily cleaned. The squeegee or the vacuum cleaner can pass quickly over them and there are no cracks to catch and hold the dirt. Wood block pavements when in good condition are about as smooth as asphalt. Streets which have very heavy traffic are paved with granite blocks, as these resist wear longest.

The new granite block paving presents a fairly smooth surface, but brushes must be used to take the dust from the cracks. Where streets are of the old-fashioned rough blocks, or are out of repair, only hand sweeping is satisfactory. The dirt collects in the depressions and is hard to clean out. It is evident that good paving is economical, for the large machines cost much less to use than a gang of hand sweepers.

Removal of Snow.—The greatest emergency which the Bureau of Street Cleaning has to meet is a heavy snowfall. If snow is allowed to accumulate in the streets, all transportation is delayed, workers are late to shop and factory, and the city's business is interfered with or stopped altogether. Those who stay at home suffer too, for the coal man, the milkman, the butcher, and the baker cannot make deliveries, and thus many may be actually cold and hungry with supplies only a few blocks away. The most serious of all the dangers is the danger of fire. Fire and police alarm wires may be broken by the storm and the streets so blocked by snow that repair wagons cannot reach the wires or the engines reach the fire. The hydrants too may be covered, so that precious time must be wasted in digging them out. At a fire every second counts.

Not so very long ago cities waited until a storm was well started and a blockade beginning and then suddenly became excited and sent the officials hurrying around to collect men and wagons to clear away the snow. Now there is a well-recognized method for dealing with such emergencies. In the street-cleaning contracts in Philadelphia the contractors are obliged to agree to turn their forces from their usual work to the removal of snow, and

to begin as soon as the snow begins to fall. Additional contracts were made in 1916 and 1917 in advance for the removal of the snow from the central part of the city. The traction company coöperates by running trolley snowplows to keep the tracks clear. Greater speed has been secured by dumping the snow through manholes into the sewers instead of carrying it to the rivers.

There is a law requiring each householder to remove the snow from the sidewalk in front of his house to within three feet of the curb within six working hours of the time that the snow ceases falling. The observance depends largely upon the vigilance of the police, who are supposed to serve notice upon people not complying with the law.

Clean-Up Week.—In 1913 the Director of the Department of Public Works and the Chief of the Bureau of Highways inaugurated the plan of an annual clean-up week. It was believed that the city contained a great deal of dirt and rubbish that was not removed by the ordinary methods, and so announcement was made that during the week from April 28th to May 3d, any quantity of rubbish would be removed free of charge by the city collectors. Clever posters were placed upon the billboards all over the city, attractive slides were shown in the moving picture houses, and circulars with pictures and rhymes were given out in the schools, distributed from house to house, and pasted on the windows of the trolley cars.

“Johnny had a little can,
A little rake and hoe;
He made a garden in the yard,
And planted seeds to grow.

Mary swept up all the dirt,
And put it in a can;
She put a cover on the top
And called the Clean-Up Man."

If all youngsters were as energetic as were Johnny and Mary, parents would be put to shame by their children and Philadelphia would be spick and span. William Penn was shorn of his dignity and represented as wielding a broom from his perch on City Hall tower.

The results were good. Perhaps the best was the education of the public in cleanliness. The bureau had underestimated the amount of rubbish which would be discovered, and the wagons were busy all of the following week carrying it away. In some congested sections of the city the sidewalks were almost impassable for days with the piles of all sorts of cast-off things. It was a marvel how all of the rubbish had been concealed in the houses and the cellars. It was estimated that the fire risks of the city were greatly decreased and that health conditions were improved. Because of this success, "Clean-Up Week" has been made an annual event.

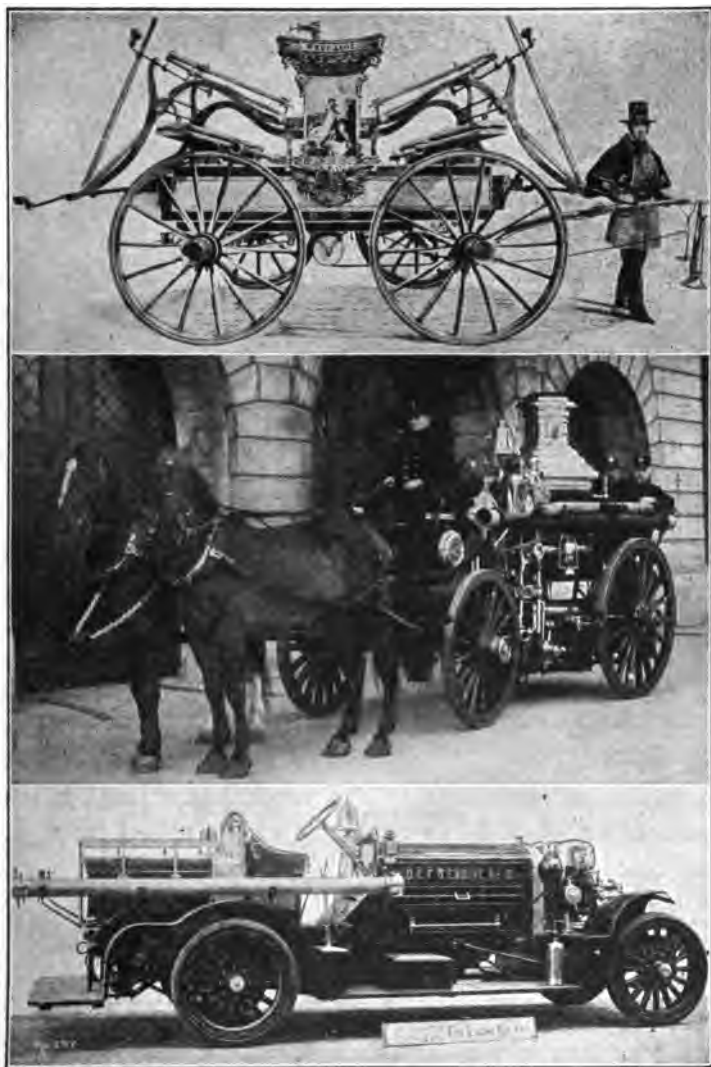
CHAPTER V

FIRE FIGHTING AND FIRE PREVENTION

Dangers in the City.—The dangers of modern city life are not, for the most part, of the kind which we can ward off by our own strength. No man can with his arm stop the course of a charging motor truck, extinguish a fire which has seized upon a whole building, or arrest a gang of thieves. Many dangers are even further from his control than these. If his neighbor erects an unsafe building which is liable to fall and crush him, he is powerless to prevent it alone. His employer may compel him to work near machinery which is unprotected and likely to injure him. If he protests he may be discharged.

To meet these modern dangers requires the coöperation of the whole community. It is to our government that we look to protect us. In fact, many people think little about the existence of government until danger threatens. The policeman and fireman are the symbols of government to their minds.

When we are in our homes at night, the chief danger which we all dread is fire. The sound of a fire bell rouses us with a feeling of terror lest the fire be near us. Fires cause destruction of property, to say nothing of the loss of life, beyond all reason. The value of the property destroyed by fire in the United States every year is about three dollars for each man, woman, and child in the country. That this is much too large is shown by the fact that the loss in Europe is only thirty cents per



(Courtesy of the Bureau of Fire)

THREE GENERATIONS OF FIRE-FIGHTING APPARATUS

person. There are two ways in which our city government meets this danger: by maintaining a fire-fighting force, and by trying to remove causes of fires.

Fire-Fighting Apparatus and Fire Station.—Everyone is more or less familiar with the fire engines and trucks, for they dash by us in the streets nearly every day. We must pay a visit to a fire station, however, to become really acquainted with them. In some stations we shall find the old-fashioned fire engine of brightly polished nickel. In the firebox a wood fire is already laid so that it can be started quickly in case of an alarm. Near the engine, in their stalls, are the splendid fire horses. They are trained to run at the first sound of an alarm and take their places in front of the engine, where the harness is suspended ready to buckle on them. The men, who may be asleep in their dormitory upstairs, arrive in a few seconds by sliding down brass poles connecting the upper with the lower floors. When the engine goes out it is accompanied by the combination wagon which carries the hose and chemical fire extinguishers. In the case of small fires the chemical extinguisher is often all that is needed. The hook and ladder truck responds to the alarm at the same time. The truck has a large ladder which is attached to it as a base and is raised from the horizontal to the perpendicular by turning a crank. It carries also portable ladders, ladders with hooks for climbing the outside of buildings, tools, first-aid kit, respirator, life net, and many other things.

In the stations with the new equipment we shall find none of the beautiful horses, which used to be the pride of the firemen, but instead large red automobile engines. There are motor hook and ladder trucks, and also com-

bination wagons. All of this motor apparatus is very costly, so that the city can install only a little at a time. When it is once secured, however, it is really less expensive than the old-fashioned kind, because it can do much more work. Philadelphia now has more than one-third of its apparatus motor driven and hopes to replace all the horses in the course of a few years. A list of the



(Courtesy of the Bureau of Fire)

LATEST TYPE OF FIRE APPARATUS

apparatus and of the stations will be found in the Manual of Councils.

The city has two "water towers," one in Kensington and one at Twenty-first and Market Streets. These are used for fires in very high buildings, when the ordinary ladders and hose are not sufficient to reach to the burning floors. They consist of a steel arrangement like an enormous telescope mounted on an automobile truck. When it reaches the fire the tower is raised from a horizontal to a vertical position. The water rushes up through the tower and through a nozzle, which can be directed by

a man below, so that it plays a stream of water directly into the upper stories of a building. If the fire is at a great height the tower can be extended like a telescope.



(Courtesy of the Bureau of Fire)

A WATER TOWER IN ACTION

When we visit the fire station we may, if invited, go upstairs and inspect the dormitory, provided with rows of beds where the men sleep until an alarm is sounded. We shall also see the captain's office and sleeping room and the recreation room where the men may amuse themselves while they are waiting. A circulating library has

been established so that they may employ their leisure time. Mr. Zueblin says that the job of a fireman "is composed of nine parts of idleness and one of heroism." At present, 1918, the men have one day off in six, and three hours every day for meals. It is proposed to introduce the "two platoon" system to comply with a state law requiring it. Under this plan each fireman spends only twelve hours out of the twenty-four on duty, and so has some chance for recreation and to see his family.

If the job of the fireman is "nine parts idleness," the chance for the "one part heroism" comes to them all sooner or later. When you visit the fire station, if you can persuade one of the men to talk to you he is likely to tell of children rescued from the top stories of burning houses, or of invalids carried to safety down tottering ladders. And he remains sympathetic and does not become hardened by the horrors and the dangers that are a part of his almost daily experience.

The Bureau of Fire.—The members of the force have various ranks and duties. Highest in rank is the Chief Engineer, who is under the Director of the Department of Public Safety. He is assisted directly by the Deputy Chief Engineer. Eleven battalion chiefs command the eleven districts into which the city is divided. These are the men who dash by in an automobile with a gong when an alarm of fire is given. They go to the scene of the fire to investigate and to take command. The firemen are organized into companies, each company commanded by a captain and a lieutenant and having charge of some piece of apparatus. These are known as engine companies, chemical engine companies, truck com-

panies, and pipe line companies. There may be two or more companies in one fire station. The men are classified according to their duties as steam engineers, firemen, drivers, tillermen, and hose and ladder men. The tillerman sits on the rear of the hook and ladder truck and turns the wheel which steers the rear end of the truck. The duties of the others are evident from their names.

The first captain to arrive at a fire commands all the other companies until the battalion chief comes. The battalion chief in turn gives way to the Chief or Assistant Chief of the Bureau of Fire, both of whom attend in person every large fire. The officer in command at a fire has a very responsible position. He must see that each man, each piece of apparatus, and each line of hose is in the place to do most effective work. He must warn the men when a roof is about to cave in or a wall to fall upon them. The police, who keep a clear space and force the crowds back from the "fire grounds," are subject to directions from him.

It is the duty of every fireman to know the fire risks in the part of the city where his work lies. Each captain is required to inspect every building, except private dwellings, in his district at least once a year. The knowledge thus gained is of great service when one of these buildings is involved in a fire, and also aids in the enforcement of the fire prevention laws.

The High-Pressure System.—In the regions where there are the greatest number of tall mills, stores, warehouses, and office buildings there are two special "high-pressure" pumping stations. The high-pressure system covers the business portion of the city between Walnut and Race Streets, between Broad Street and the Delaware River,

and also the mill section of the city lying, in general, between Allegheny Avenue, Girard Avenue, Germantown Avenue, and Front Street. The station at Race Street and Delaware Avenue draws its water directly from the Delaware River, that at Seventh and Lehigh from the Fairhill reservoir. In case of emergency the force of both stations may be used for one fire by the



(Courtesy of the Bureau of Fire)

HIGH-PRESSURE FIRE APPARATUS

opening of connecting water mains. Their combined strength is equal to that of thirty large fire engines. Gas engines pump the water through special mains to special fireplugs. Hose attached to the high-pressure plugs can throw streams of water to a height of 250 feet. The hose used has a diameter of $3\frac{1}{2}$ inches, one inch more than ordinary fire hose, and the stream from it is so powerful that it requires eight men to handle one line of hose in operation unless it is clamped to a pivot stand.

In the high-pressure regions there are three special

fire companies for that service. They are equipped with extra large and heavy combination wagons carrying the large size hose. The pumping stations also have crews with emergency trucks, painted a dark green to distinguish them from the fire apparatus. These crews attend every fire to see that the water supply works properly and to repair any breaks which may occur because of the



A FIRE BOAT

(Courtesy of the Bureau of Fire)

extremely high pressure. Breaks are a serious matter, having been known to blow granite blocks from thirty to forty feet in the air. Inspections of the system are made weekly by the crews attached to the pumping stations. The pumping stations and the men connected with them are under the control of the Bureau of Water, not the Bureau of Fire. Philadelphia was the first city in the United States to install a high-pressure system, and it still has one of the best.

Fire Boats.—For fires on the river front the city has

one fire boat, the *Edwin S. Stuart*, stationed at the Race Street pier. It is equipped with engines which pump water directly from the river. The boat was built in 1892 and is not adequate for present needs. There should be a greater number of these boats and of a more powerful type. Three little police boats, named after other mayors of Philadelphia, have small fire pumps which make them of some assistance.

Fire School.—The men who enter the service of the Bureau of Fire for the first time have little knowledge of the methods of the expert fire fighter. To teach these recruits, a training school has been established. After the new man has passed the civil service examination, has been enrolled and given his uniform, he goes to school for thirty-five days. He enters a class where he is taught such things as the names and uses of all the apparatus, the quickest and most efficient way to use each, the duties of men in each kind of service, how to enter burning buildings under every possible set of circumstances, how to carry unconscious persons, how to administer first aid to the injured.

Fire Alarms.—A visitor to a fire station is sure to notice the frequent ringing of a small electric bell called the "joker." Every time a company is called out and every time a company returns to its station the fact is indicated by the bell. The number of strokes tells just what company is moving and whether it is coming or going. By this means each station knows what is happening all over the city. When there is a call for the company which belongs in the station house, a larger bell called "the gong" is rung. It is necessary for all signals to be sent to all stations, because in case of a large fire the

engine companies move into each other's districts so as to protect the regions from which the engines have been withdrawn. Each station has one of its men always on the watch. He sits at the desk, listens to all the bells, answers the telephone, and keeps a journal of all that happens.



(Courtesy of the Bureau of Fire)

FIREMEN'S BAND

It is well to know how to send in an alarm of fire. If we are near a telephone when we discover a fire, we should call the emergency number on the cover of the telephone directory or the Electrical Bureau. The operator will connect us with the fire headquarters so that we can give the location of the fire. If we are near one of the fire alarm boxes we may give the alarm there. These are iron boxes on posts on the sidewalk.

There are two kinds, those without keys and those which have keys with glass fitted over them. The directions on the keyless box read: "Fire Alarm Station. To send in an alarm, turn the handle to the right as far as possible, open door, pull lever all the way down and let go." Those on the boxes with keys read: "To send in an alarm, break the glass, unlock the door by turning the key to the right, then pull the lever inside all the way down and let go." We should be careful not to do it while the bell inside is ringing, for we would be interfering with another alarm. It is important to pull the lever all the way down and let go. We should stay near the box to direct the firemen to the fire when they come.

A telephone call and an alarm from a fire box both go in to the Electrical Bureau in City Hall. There the operators send the alarm to the proper station, and report on the little "joker" bells in all the fire and police stations the number of the company which has been called out. The Electrical Bureau is one of the most important parts of the Department of Public Safety in protecting life and property. On a visit to City Hall it is well worth while to go to see the elaborate mechanism which is used for the fire alarm and telephone systems. Not only does this bureau send alarms of fire, but it manages the system of police telephones all over the city and the telephone connection of all the departments in City Hall, and inspects the electric lights on the streets.

The first alarm calls a battalion chief and one company. When the chief arrives he opens the inside door of the nearest alarm box and sends a Morse code signal telling of his arrival. If he thinks that more help is needed he sends in a second alarm. He may call as many as six

companies. In some localities, where the risks are great, the first alarm calls six engine companies, two trucks, three chiefs, and a high-pressure wagon.

Insurance Patrol.—We sometimes see a long red automobile truck filled with men dressed like firemen and having the words on its side "Insurance Patrol." There are three of these companies: one at Fifth and Arch Streets, one at Fifth and Hewson Streets, and one at 2122 Market Street. They do not belong to the Bureau of Fire but are provided by the insurance companies of the city. Often much property is damaged at a fire though it is not actually burned. The insurance companies have to pay the loss, so they send the patrol to the fire to help save property.

The Cost of Fires.—American cities have the costliest fire-fighting equipment of any in the world. This is made necessary by the carelessness of the American people in regard to fire risks. Mr. Zueblin says in his "American Municipal Progress" (page 134): "The cost of fire protection each year is almost as great as the fire loss per annum. It is estimated that the cash cost of conflagrations in the United States is \$416 a minute, or \$600,000 a day. That, however, refers only to property destroyed. We have to support unnecessarily expensive fire departments to protect our very defective property. To neutralize the shameless carelessness of citizens we have to increase enormously the service of our water departments and pay heavy insurance premiums. As a consequence of these fires, industry is interrupted, there is a grave loss of employment, and, worst of all, a destruction of human life amounting to two thousand persons a year, while those incapacitated number six thousand.

Apart from the waste of life, the mere pecuniary loss is nearly half a billion dollars a year. A federal report of 1907 shows that this fire loss exceeded the total value of the gold, silver, copper, and petroleum produced in the United States for that year. It shows also that one-half the value of the new buildings constructed in one year goes up in smoke. 'The buildings consumed annually, if placed on lots of sixty-five foot frontage, would line both sides of a street extending from New York to Chicago.' "

The annual report of the Department of Public Safety for 1916 gave the figures for that year in Philadelphia as follows: loss on buildings, \$869,017; loss on contents of buildings, \$1,715,173; and as a direct or indirect result of fire the loss of 186 lives.

Fire Prevention Inspection.—The Fire Marshal belongs to the Bureau of Police, and from his office in City Hall directs the work of fire prevention. If you visit him you will see upon the wall a large map of Philadelphia with many black pins, each one representing the location of a fire during the preceding year. The pins are very close together in the central part of the city, making clear the reason for the extra precautions taken there. Every morning in that office the four Assistant Fire Marshals assemble to consult and to receive their orders for the day. They have the city divided among them for the inspection of moving picture houses and places for the storage of gasoline, chemicals, and explosives. They follow up complaints made to the Fire Marshal and attend all fires to examine into the causes. When the number of firemen will permit it, the routine fire inspections throughout the city are made by a force of firemen,

one detailed from each district, officered by a captain, a lieutenant, and four street supervisors. The Fire Marshal instructs them in the laws for fire prevention, which must be obeyed by the owners and occupants of buildings, and furnishes them with blank forms on which they are to report the condition of the buildings they visit.

There are great advantages in using firemen for inspection service, because from their experience in fighting fires they know a great deal about fire hazards. It is also of direct benefit to the company of which each man is a member that he should know at first hand of the condition of the buildings in which they will have to fight fires. Expense is saved by using these men, who are already in the city's employ.

Among the things which the inspector looks for in visiting a building are the accumulation of oily rags, the placing of hot ashes in wooden receptacles, the use of swinging gas jets near walls, the piling of materials so as to block the way to the fire escape, the storing of inflammable materials, the protection of woodwork near furnaces and stoves, and the presence of water pails or fire extinguishers in good condition. It is not possible to tell in this place all that one should know about fire risks. Every citizen should have a copy of the pamphlet on the fire laws issued by the Fire Marshal and should make himself familiar with them. It is every one's duty to be a volunteer inspector and help remove the dangers which threaten us on every side.

Unfortunately the Fire Marshal has not enough assistants to inspect private houses regularly. Fifty per cent of all fires occur in private houses, yet the public are not awake to the fact that it would be cheaper to

pay for inspectors to prevent these fires than for firemen and engines to put them out and builders to replace them. Over fifty per cent of fires in private houses start in cellars or garrets as a result of careless housekeeping. In his report for 1915 the Fire Marshal stated that 2,000 fires during that year were due entirely to carelessness. Every person should know what the fire risks are in his own house and remove them so far as possible. He should see that the family has at least one chemical fire extinguisher or a pail of water where it can be quickly reached. He should see that every one in the house knows just what to do in case of fire. Such simple precautions as closing the windows to cut off the draft, keeping close to the floor to avoid smoke, and covering the head with a damp cloth when passing through smoke-filled rooms, should be taught even to the little children.

For the important business of seeing that the buildings of Philadelphia conform to the law in maintaining fire escapes, there are ten fire-escape inspectors who report to the Fire Marshal. They may order fire escapes erected, fire pails, exits, and exit signs provided, and any other improvements required by law.

The fire inspection of places of public assembly is very important, because special fire risks exist there and the lives of great numbers of people are endangered. The laws require that no theater or moving picture house may operate without a license from the Mayor, which is not granted until the Bureau of Fire and the Bureau of Building Inspection report that the place conforms to the fire-prevention and building laws. Among many other things the law states the required number and width of aisles, entrances, exits, staircases, and fire

escapes in proportion to the number of people to be accommodated in the theater.



(Courtesy of the Bureau of Fire)

FACTORY FIRE-DRILL SUPERVISED BY FIRE MARSHAL'S INSPECTORS

Exits must be marked with red lights and a sign "exit" in letters at least eight inches high: no seat may have more than six seats intervening between it and an aisle. The stage must be separated from the auditorium by a fireproof wall and an asbestos curtain. It must be

provided with a skylight which opens of itself in case of fire, fireproof scenery, automatic sprinklers, water pipes with hose, fire alarm box, and chemical fire extinguishers.

Moving picture theaters must in addition enclose the picture machine in a fireproof booth, because the reels of pictures are made of celluloid and are very inflammable. The operator of the moving picture machine must have a license granted by the Mayor, and this is granted only after he has passed an examination given by the Fire Marshal and the Chief of the Electrical Bureau.

In each theater the employees are organized into a fire company with a chief. These men are trained by a member of the Bureau of Fire detailed to the Fire Marshal's office, and their chief is required to make a daily report to the Fire Marshal of the condition of the theater and its fire appliances. They have frequent drills in which each person knows just what he is to do in case of fire. The theaters of the city are divided into seven districts for the theater patrol, and one inspector, a uniformed fireman, is assigned to each district. These men go on duty at noon and visit every theater in their districts during every performance. Brief daily reports are turned in to the Fire Marshal. Thorough inspections from attic to cellar are made at frequent intervals.

Moving picture houses are visited regularly by the Assistant Fire Marshals. As a further safeguard the street sergeants of the police force throughout the city visit them twice during each performance and report any violation of the fire laws which they observe.

It may seem as though all these precautions were unnecessary; but when such a terrible thing occurs as the Iroquois Theater fire in Chicago in 1903, where six

hundred people lost their lives, no amount of care to prevent such disasters seems too great.

As a matter of ordinary precaution every person on visiting a hotel, theater, or moving picture house should note the location of exits and fire escapes. The greatest danger in a place of public assembly is not from the fire itself but from the panic caused by a cry of fire. If a person thinks of it in advance and has his plans made, there is less likelihood of his becoming excited and joining the rush.

Philadelphia's fire inspection system is of recent origin. Until 1911 the Fire Marshal's duties were few and were performed in a perfunctory manner. Increased powers were given to the Fire Marshal by the State Legislature in that year, a new man was appointed to the office, and the system of inspection by uniformed firemen was started. The first group of inspectors found deplorable conditions. Fire escapes were often blocked with packing boxes, and on one building were so decayed that they would have fallen with the weight of ten or twelve people. In one place the doors to the fire towers had been locked so long that the locks were rusted and would not open. A factory with three hundred occupants had one usable exit, the others were all locked. In a place of public assembly the cellar was found to contain eight cartloads of inflammable rubbish. At the end of eleven months of the new system the Fire Marshal reported 108,460 faulty conditions remedied.

Several years have passed since then and people have forgotten about the dangers which were discovered. It is difficult to get the city to provide enough inspectors or to enforce the prosecution of people who break the

law. Philadelphia is full of fire dangers and it is a wonder we do not have one hundred per cent more fires than actually occur.

Building Inspection.—If we could have all the old buildings torn down and new ones built in their places,



(Courtesy of the Bureau of Fire)

TYPE OF FIRE APPARATUS NOW DISPLACED

there would be much less work for the firemen to do. Laws governing the erection of new buildings are growing more strict all the time. It has been many years since any wooden building might be constructed in the built-up portions of the city. Councils from time to time limit still further the areas in which frame buildings may be erected. Recently only the Thirty-fifth Ward and portions of the Twenty-first, Thirty-ninth, Fortieth, Forty-first, and

Forty-second were still open to frame buildings. These regions are sparsely settled and contain many farms. Special exceptions are made for temporary one-story buildings and for Woodside and Point Breeze Parks. The law requires that when any old wooden building becomes so dilapidated that it is reduced to less than fifty per cent of its original value, it must be torn down.

New large office, school, hotel, apartment house, theater, hospital, store, or factory buildings must now be constructed of fireproof materials. The most modern are built of concrete and steel. A little wood is used in window frames and doors, but very little. The floors are of concrete or stone or of wood laid on a bed of concrete. The staircases, partitions, and elevators are of metal, concrete, and glass. Such buildings are designated in the law as of the "first class," or fireproof construction. In a fireproof building the danger from fire is not removed as the name would seem to indicate, but it is much decreased. A recent fire in one of the upper stories of the North American Building burned the furniture in one or two suites of offices, but because the walls were fireproof was easily prevented from spreading.

Fire walls, dividing the building into sections, are required by law in warehouses, stores, and factories of the first class. No such wall may have more than three openings on each floor and each one must be provided with fire doors which close by their own weight in case of fire. Such walls are especially desirable in department stores and factories where great numbers of people are employed. If a fire breaks out, the people may move quickly through the fire wall into the next section, close and they are safe, so that

they may take their time in moving to the street by staircases. In such a building there are so many people that it is difficult to empty the building quickly by fire escapes or fire towers.

Smaller buildings, of six stories or less, are not subject to such rigid requirements, and may have wooden beams, doors, and interior finishing used in their construction. They belong to the "second class." Dwellings are permitted to be of lighter material still, and belong to the "third class."

It would be tiresome to go farther into the details of the building laws, which fill a small volume and deal with every part of construction. They regulate the strength of the walls in proportion to the height, fire escapes and fire towers, the strength of floors and walls to support heavy tanks and machinery, yard space for dwelling houses, window space for tenement houses, and a thousand other things. The section of the law relating to the building of theaters occupies seventeen pages.

To enforce the building laws, there is a Bureau of Building Inspection in the Department of Public Safety. No one is permitted to erect any structure or to make any alterations in an old building without a permit from this bureau. The inspectors of the bureau go over the plans before a permit is issued, and visit the place while the work is going on to see that the law is being obeyed. If a building is damaged by fire or accident the inspectors visit it, and if it is unsafe require it to be removed or repaired. They decide what type of fire escapes shall be required on old and new buildings and superintend their erection. The safety of theaters and other places of public assembly depends quite as much on the buildi-

inspectors as on the fire-prevention inspectors, for it is the duty of the former to see that the safety laws are carried out.

New Methods of Protection.—The city bureaus have been aided a great deal in their efforts for fire prevention by the insurance companies. The rates which they charge for fire insurance are less in proportion to the means of protection which the building possesses. Modern store, office, and factory buildings have quite generally adopted the automatic sprinkler systems. These consist of pipes running across the ceilings at frequent intervals and connected with a tank full of water near the roof. The pipes have small cocks a few feet apart, closed with a stopper of very soft metal. When some of the stock takes fire, the heat soon melts the stoppers and water is released from the pipes directly over the fire. This usually stops it before the fire engines arrive. Many new buildings also have standpipes connected with the city water mains, running up to the highest floors and provided with fire hose and nozzles on each floor. These standpipes and sprinkler systems have hose connections on the outside of the building, so that if the fire continues the fire engines may be attached to the system within the building and pump water through all the pipes. The Curtis Publishing Company has in its new printing house what is called an "apron of water." Perforated pipes along the edge of the roof can release a sheet of water like a waterfall, which will protect the structure on the outside in case there should be a fire next door. This scheme is also provided over the stage of some theaters.

The Sane Fourth.—For many years the Bureau of

Fire looked forward with dread to the Fourth of July, as did also the city hospitals. Good Americans, especially boys, thought that their patriotism was not sufficiently expressed unless they made a great deal of noise in a way that was likely to do harm to themselves and to the surrounding property.

The damage is shown by the following figures from the Fire Marshal:

Deaths and injuries in the City of Philadelphia from the Fourth of July celebrations in a period of five years:

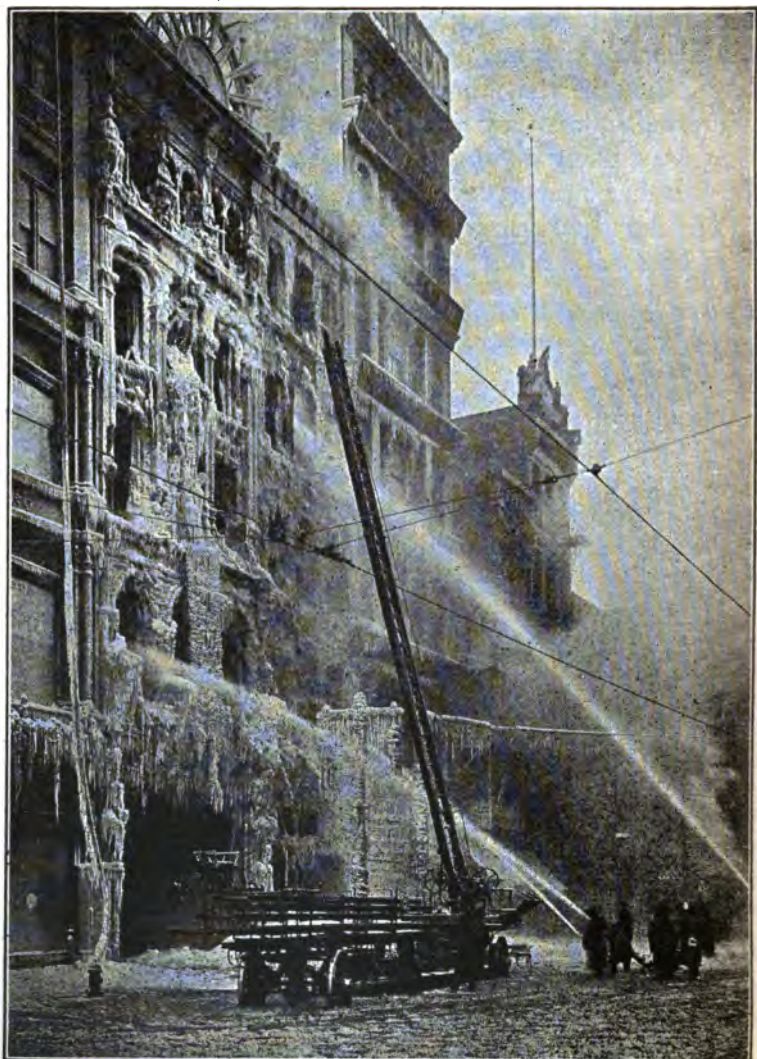
YEAR	DEATHS	INJURED
1913.....	3	340
1914.....	4	237
1915.....	0	280
1916.....	0	230
1917.....	0	76

The number of fires, with the loss during the same period, is as follows:

YEAR	NO. OF FIRES	LOSS
1913.....	40	\$5,021
1914.....	29	2,128
1915.....	27	4,306
1916.....	65	3,900
1917.....	17	894

Recently there has been a strong movement for a "Safe and Sane Fourth." Picnics, parades, speechmaking, pageants, and community celebrations have been organized to honor the day more fitly. Laws have been passed limiting the use of firecrackers, toy pistols, and fireworks, and prohibiting the use of toy balloons. It is hoped that all young citizens, especially those who study civics, will help to make the day one of real patriotic celebration.

Responsibility of the Citizen.—Perhaps it would seem that so much is done by the city bureaus that we should



(Courtesy of the Bureau of Fire)

FIRE IN WINTER

not worry about the dangers from fire. The trouble is that even all these efforts will not prevent great loss by fire. Why is it? It is because the people themselves are so careless. There are still many who will throw a match or a cigarette on the floor, kindle the kitchen fire with kerosene, let the window curtain blow into the gas jet, allow rubbish to collect in the cellar, put hot ashes into a wooden barrel, and do many other foolish things. Some business men will run all kinds of risks to the lives of employees and customers rather than rebuild their stores or factories according to the requirements of safety, and try to deceive the inspectors or use political influence to escape punishment. Then again the laws are not sufficiently strict, because public opinion is not awake to the need, and people do not like to be bothered with more restrictions. Every citizen should know the facts, should study the way to prevent fires on his own premises, should help to spread the habit of carefulness among his friends. Only by such care can the United States be rid of the fearful waste of half a billion dollars and two thousand lives every year. To remind every one of this duty the National Fire Prevention Association has asked that October 9th, the anniversary of the terrible Chicago fire of 1871, shall be observed everywhere as "Fire Prevention Day."

CHAPTER VI

POLICE, ACCIDENTS, WEIGHTS AND MEASURES

The Patrolman and His Duties.—The little army of more than 3,000 men which guards our 129½ square miles of territory has many and varied duties to perform. The popular notion is that the policeman's, or "patrolman's," chief duty is to arrest offenders, but his work is largely in the line of preventing trouble and danger. He assists in protecting our life and property by aiding the firemen at fires; by reporting nuisances to the Bureau of Health, by reporting defects in the pavements to the Bureau of Highways, by reporting to the Bureau of Building Inspection any alterations in buildings being made without a license; in short, by noting anything that is dangerous or out of order in coöperation with the other parts of the city government. Not the least of his duties is that of acting as general bureau of information to travelers on the streets. For all this work he carries about with him a note book with blank forms on which to report the things he sees out of order.

The new men are appointed according to the requirements of the Civil Service Commission. They must pass both a physical and a written examination to show their fitness for the work. No person who is not a citizen of the United States, who cannot read or write the English language, and who has not resided in the state at least one year preceding his appointment, is eligible for appointment as a member of the police force.

Police School.—When a man has been sworn in and enrolled he must report first to the school of instruction for special training in the duties of his position. There may be seen forty or more men at a time in one class for a period of four weeks. The police captain in charge of inspection, drill, and instruction supervises the school,



(Courtesy of the Bureau of Police)

POLICE SCHOOL

Policemen are learning the traffic regulations.

assisted by instructors and special lecturers, and the new men are given a thorough course in their duties. Among the subjects taught are the rules and regulations of the bureau, general and special duties of patrolmen, writing of reports, laws and ordinances, geography of the city, securing and preparing evidence to present in court, and first aid to the injured. Lectures are given by specialists on such subjects as the methods of counterfeiters, pre-

vention of cruelty to animals, resuscitation of drowning persons, and the handling of prisoners.

After finishing the course of the school the new man enters regularly upon the patrol of his beat, but continues always to have military and physical drill under the drill-master. This continuation course includes military



(Courtesy of the Bureau of Police)

EMERGENCY TREATMENT FOR DROWNING PERSONS

Policemen must learn the best method of treatment for accidents.

drill, discipline and courtesy, horsemanship, target practice, wrestling, boxing, running, and swimming. Even when a man attains the rank of sergeant or lieutenant he continues to drill in order to learn how to command his men. Every October there is a Police Carnival, when the police display their skill in drill and athletics.

At his station house the new man finds himself assigned to a platoon in charge of a street sergeant, and with his

platoon he goes out upon the street for a period of eight hours. The sergeant makes the round of his district to see that each man performs the duties of his beat properly. Each officer must report to his station every hour, through the telephones in the police patrol boxes.

In 1912 the three-platoon system was adopted to shorten the working day for the police. Formerly the hours of service were irregular and might vary from thirteen



(Courtesy of the Department of Public Safety)

POLICEMEN TAKING GYMNASIUM EXERCISES

to even twenty-four hours in time of an emergency. Now only eight hours are required. The platoons change at 8 A. M. and 4 P. M. and 12 midnight. Occasionally a man is required to give extra hours in order that a few men may be kept at the station in reserve to meet a sudden emergency such as fire or riot.

The Police Station.—Each of the forty police districts into which the city is divided has one or two police stations. In recent years the city has been erecting fine modern buildings in various sections of the city. Let us

take one of these as the type of place where the patrolman reports for duty and spends part of his time. In charge of the station is a lieutenant who is responsible for the maintenance of the public peace, enforcement of the law, control of the force in his district, the good order of the station house, and the custody of prisoners until they are discharged, bailed, or committed to prison. He must make daily reports of occurrences in his district to his captain. Two house sergeants assist the lieutenant, one of them being always on duty at the police telephone, receiving reports from the men and orders from headquarters. The patrolmen of this house are divided into three platoons of fifteen men each. In charge of a platoon is its street sergeant. Several men are detailed for work as drivers and caretakers. In this particular house the first floor contains the lieutenant's office and bedroom, the sergeants' offices and bedrooms, magistrate's court, witness room, recreation room for men, two cells for female prisoners and four for male prisoners. On the second floor there are two large dormitories for the men, a locker room, and a lavatory. On the third floor we find the office and quarters of the captain of one of the five police divisions of the city, and the storerooms. The basement houses a gymnasium, a shooting gallery, a shuffleboard, a dynamo for the generation of electricity for the patrol boxes, a carpenter shop, and a pool room. Many stations also contain accommodations for the patrol wagon and horses.

In case of a breach of the peace or other violation of law, the patrolman must take the offender to the station house. Should there be resistance or a large number of offenders, he may call from the nearest police telephone

to the station for the patrol wagon. In response to the call the patrol sergeant comes with the wagon, driver, patrol officer, and additional officers if needed. On arrival at the station the prisoner is taken before the police magistrate, and if there is not one at the station then he is taken to the nearest magistrate's office. The



(Courtesy of the Bureau of Police)

DIRECTING TRAFFIC WITH THE SEMAPHORE

magistrate hears the charge against him and either releases him, holds him for court, or releases him on bail. Cells in the station house are used only for the temporary care of prisoners while their cases are under consideration.

Mounted Police and Traffic Squad.—Besides the regular patrolmen with their officers, the Bureau of Police includes marine police, City Hall guards, detectives, the Fire Marshal with his assistants, the maintenance

force, and the traffic squad—mounted, foot, and motor. There is a close relation of each one of these parts of the force to the others.

There were in 1918 three hundred and ten mounted patrolmen distributed throughout the districts. Most of them are assigned to beats in the suburban areas, where a large territory must be covered by one man. One hundred and eight mounted men belong to the



(Courtesy of the Bureau of Police)

SAFETY FIRST FOR SCHOOL CHILDREN

traffic squad, whose duty it is to regulate the heavy traffic on the crowded business streets in the center of the city. Sixty-two officers, including two sergeants, compose the motorcycle squad. They patrol the streets most used by automobiles and bicycles, to enforce the speed regulations. Their high-

speed machines make them also valuable for call in any sudden emergency. Two hundred and twenty-five foot patrolmen belonging to the traffic squad for the center of the city have headquarters at City Hall.

By day the foot patrolmen of the traffic squad are employed in regulating traffic in the center of the city. Most of them are over six feet in height and add much to the dignity as well as to the safety of the city streets. The traffic squad, both mounted and foot, carry out the traffic regulations issued by the Director of Public Safety. Drivers must know in which direction they are allowed

to go, and the traffic policeman with his whistle or semaphore checks and starts again the moving streams where two streets cross. Iron posts with cords are used to mark off the path which must be followed by the cars and to provide "safety zones" for pedestrians. Philadelphia was the first to use these devices. New York City has since copied the system and carried it out on a more elaborate scale. The most recent edition of the traffic rules may be secured from the Bureau of Police in City Hall.

Harbor Police.—The wharves and docks of the Schuylkill and Delaware River fronts are often scenes of lawlessness and of accidents, so it has been found necessary to maintain boats and officers to patrol the rivers. There are at present four police tugs and four fast motor launches in the city service. Each tug has two pilots, two engineers, and twelve policemen. The launches carry three men. The harbor police guard wharves, landings, and vessels in the river; rescue persons from drowning; search for bodies of drowned persons; and assist the firemen in fighting fires on the docks and among the ships. The police tugs are equipped with fire-fighting apparatus to assist the firemen by throwing streams of water from the river.

City Hall Guards.—There are about seventy City Hall guards, with two lieutenants, who patrol the corridors and courtyard of the building. They are divided for day and night service.

Detectives.—The detectives are a special force of twenty-nine picked men under the captain of detectives. It is their duty to search for criminals when the ordinary police have been unable to locate them, to search for

evidence of crime, to locate stolen property, to watch and intercept professional criminals, and keep a complete identification record of criminals. Exact measurements are taken of a prisoner according to the Bertillon system. The official photographer takes his picture in both full and side face. He is made to record his finger prints. Finger prints, measurements, and photographs are filed according to an exact system, so that if the man appears again, even after the lapse of many years and under another name, he can be identified at once. A standard form of record is used by most cities, and a method of exchange is in operation so that old offenders may be recognized when they appear in a new city. The office of the detective force has telephone connection with all the pawnshops in the city, so that stolen property may be traced as soon as it is reported to the police. Pawnbrokers are required to send in a daily report of all articles received.

Maintenance Force.—Besides the regular police, the Bureau of Police contains those men who are assigned to other than police duties and who, nevertheless, are of great importance to the bureau. The record division, with a chief clerk and office force, keeps the books and records of receipts and disbursements in the central office and in all the station houses. The police telephone exchange, which connects all the police stations, requires the services of eight or ten men. The drill-master has charge of the instruction and drill of the men. The superintendent of stables, with a corps of drivers and hostlers, has the care of the horses. The chief surgeon gives the men their medical examination and supervises the district surgeons. The chief surgeon must attend all

large fires, parades, and other public affairs and arrange for medical service and relief. The district police surgeon may be called upon to care for the sick and injured brought to the police station and attends fires in his district. He is not paid by salary but according to services rendered.

Organization of the Bureau of Police.—The rank in the bureau has been indicated in the account of the duties of the various members. Beginning at the bottom, we have the patrolmen organized into platoons under the command of a street sergeant, while the station house is under the house sergeant. The whole district is commanded by a lieutenant. The forty-two districts are organized into five divisions each under a captain, who has his headquarters in one of the police stations of his division. A sixth division is made up of the traffic police, harbor police, training school, and stables. All of the divisions are com-

manded by the Superintendent of Police, the head of the bureau, who has his office in City Hall. He in turn is subordinate to the Director of the Department of Public Safety.



(Courtesy of the Bureau of Police)
A POLICE CAPTAIN

No policeman may be dismissed by the Director except upon charges of improper conduct or for old age or disability. The dismissed officer, if dissatisfied, has the right to a trial before a court made up of members of the department. This is provided by Article II of the Bullitt Act.

Unobserving people sometimes do not distinguish the uniform of a policeman from that of a fireman. Both wear blue, but the fireman's buttons and emblems are of nickel (except in the case of the chiefs), while the policeman's buttons and emblems are brass and his badge is nickel. The fireman wears a Maltese cross on the front of his cap, the policeman wears the arms of the city. The policeman has a shield-shaped badge containing the seal of the city on his breast, the fireman has not. It would not be worth while to describe all the differences in the dress of the various ranks of the police, for they are liable to change. The service emblems which the men wear on their cuffs are a gold leaf for twenty years of service, a gold diamond-shaped pin for fifteen years, a silver diamond for ten years, and a bronze diamond for five years.

Police Signals.—There are police telephones, at frequent intervals on the streets, in iron boxes much resembling the fire-alarm boxes. The patrolman on the beat is required to report to his station house from one of these at intervals of an hour. In case he needs help or advice he may call up at any time. The house sergeant has no way of reaching him unless he does call up, and if a call for help comes over the public telephone to the station house, must send reserve officers. New York and Boston are using a new system of signaling by lights, which may

be introduced here. In New York there are high iron posts at prominent places along the streets, bearing green lights. When a policeman is needed all the lights along his beat are flashed from the station house. As soon as he sees them he hurries to the nearest telephone and gets his directions. In Boston red lights along the Charles River are used to call the police of the river front.

Park Guards.—The motor patrol boat *Rescue*, which goes up and down the Schuylkill River in Fairmount Park to look after the safety of the pleasure seekers on the river, is under the control of the Park Commissioners. The park guards too are a separate organization under the Commissioners and not responsible to the Director of Public Safety. The control of the Park Guards extends through the Parkway even into the center of the city.

The National Guard, Constabulary, Army and Navy.—There have been times in the history of Philadelphia when the police force was not strong enough or numerous enough to preserve order in the city. Many people can remember the terrible times of the trolley strike in 1910, when the cars which operated in defiance of the strikers



(Courtesy of the Department of Public Safety)

OUR STREET CORNER FRIENDS

Mail boxes, fire alarm, and police telegraph stations.

were stoned by mobs and many passengers and employees were injured. When the police proved unable to stop the violence, the organized militia of Pennsylvania was called in. This consisted of the regiments of the National Guard which trained in the armories, and which went to the Mexican border and finally to France. As the strike continued and became more violent, the Governor was asked to send the State Police, the Constabulary. This is a comparatively small body, five hundred men, but picked men with good training and experience, which has for its duty the preservation of order in the less closely settled regions of the state, chiefly in the mining region. They are at the call of any part of the state which is in need of special protection. They have the reputation of being the best trained and ablest body of state police in the United States. New York recently adopted the same system. In the case of the Philadelphia trolley strike they helped to restore order. When the National Guard was sent to France for war service, the Home Defense Reserve was created to take its place in maintaining order. We have therefore two bodies of defenders besides the city police force in time of need. Indeed, should the occasion warrant it, the army and navy of the United States may be called upon to protect Philadelphia.

The Prevention of Accidents.—The newspapers every day are filled with accounts of accidents. Many of these are directly due to the carelessness of the persons injured, but we look to the officers of our government to ward off as many as possible of the dangers which threaten both the wise and foolish. The report of the Bureau of Police for the year 1916 gives the total number of acci-

dents reported by the police as 12,358. There were probably many more not reported. Of these accidents 797 were fatal. The accidents are classified into sixteen groups according to causes, and of these the most numerous in order of number were falls, automobiles, trolley cars, teams, falling objects, burns, asphyxiation,



(Courtesy of the Bureau of Police)

POLICEMAN RENDERING FIRST AID

machinery, shooting, motor cycles, bicycles, and defects in the highway.

1. *Street Accidents.* In describing the work of the Bureau of Fire and the Fire Marshal we have seen how the community is striving to decrease injury and loss of life from fires. The police are depended upon to prevent accidents upon the streets, since it is their business to enforce the various laws for safety. These

laws are passed by the State Legislature and by City Councils, but often leave the way open for detailed rules to be made by the Director of the Department of Public Safety. An example of this is given by the traffic rules, which are issued by the department under an authorization by the Legislature and Councils. The work of the



(Courtesy of the Bureau of Police)

POLICEMAN KEEPING BACK A CROWD

police in enforcing those rules has been described. According to law, automobiles and motor cycles may not be driven by a person who has not an official license, nor by any person less than sixteen years of age. This is intended as a safeguard against reckless driving by incompetent people. In some other states, for instance in Massachusetts, the applicant for a license must first demonstrate his ability to run a car. In Pennsylvania

all that is necessary is that the applicant shall give the name and number of his car and pay the license fee. A driver's license is issued for fifty cents. It frequently happens that a license is secured before the licensee has learned to drive. This laxness may account in part for the great number of automobile accidents.

It is the duty of the police also to see that people are not endangered by falling objects. The heavy signs hanging above stores are a source of this kind of danger. An ordinance of Councils regulates the size and position of the signs and the security of their fastenings. The policeman must report any violation of the law. He must also see that the sidewalk is roped off where there is any danger from building operations or repairs. As we have seen (Chapter V), the Bureau of Building Inspection must approve the plans for any new building or for any alteration to an old one so that the safety of the public may be secured.

The number of deaths from asphyxiation, either by illuminating gas or by smoke at a fire, has been decreasing slightly in recent years. This may be due to the use of the pulmotor. A large number of these have recently been added to the equipment of the fire and police stations. A pulmotor is a machine for inducing artificial respiration, forcing the lungs to act and throw off the poisonous gases. Every policeman and fireman is trained to use it.

Defects in the highways so serious as to be a cause of accidents have given rise to severe criticism of the city's policy of furnishing the Bureau of Highways with an inadequate force of inspectors, and not permitting the bureau to do its own repair work.

2. *Industrial Accidents.* Accidents occurring to work-

men from machinery or other dangers of their trades are alarmingly frequent. Records of the Pennsylvania Department of Labor and Industry for the first seven months of 1917 showed that 1,877 workers were killed and 139,598 injured during that brief time. The state government has taken upon itself the protection of the workers and has passed many factory laws. To enforce these laws the Department of Labor and Industry at Harrisburg has a corps of inspectors who visit industrial plants all over the state. Every worker, especially, should know what laws are intended to protect him so that he may know when his employer is disobeying the law. A further discussion of the subject will be found in Chapter XII.

A strong incentive to the employers to obey these safety laws was added by the passage of the Workmen's Compensation Law in 1915. This law provides a definite compensation for injuries to employees to be paid by the employer, instead of the old method by which the employee had to recover damages by a lawsuit. (See Chapter XII.)

3. *Accidents in Transportation.* Accidents from trolley cars, while still very numerous, show a marked tendency to decrease in recent years. The improvement is largely due to the efforts of the traction company to educate the public to be careful and to their introduction of the "nearside" cars. The subject of trolley accidents and of the state Public Service Commission and how it protects the public by regulating the street railway companies are explained in Chapter XI.

Philadelphia used to have a large number of accidents due to grade crossings. That was because of the old

custom of letting the steam railroads cross the streets on the same level, with only a gate to keep the street traffic from passing when there was a steam train on the tracks. In the years gone by there was a constant agitation in the newspapers to have this danger removed. Fortunately the city government, through agreements with the railroad companies by which the city paid a part of the expense, has succeeded in having nearly all of the grade crossings removed. (See Chapter XI.)

Bureaus of Elevator Inspection and Boiler Inspection.—The Bureau of Elevator Inspection, as its name indicates, is concerned with the examination of elevators all over the city. Each elevator contains a framed license card stating that



(Courtesy of the Bureau of Police)
EMERGENCY MOTOR CYCLE

the elevator has been found in good condition, that it is licensed to carry a certain number of passengers or a certain amount of freight, and the date when the license expires. Operators of passenger elevators must be licensed by a board of examiners consisting of the chiefs of the Electrical Bureau, Bureau of Building Inspection, and Bureau of Boiler Inspection. If we visit the engine room of a school or of any other large building we shall find a similar framed card stating that the steam boiler has been inspected, that it is licensed by the Bureau of Boiler Inspection, and for how long.

Street Lighting.—In European cities the number of accidents at night were greatly increased during the great war by the government regulations forbidding the use of lights because of the dangers from Zeppelin and airplane raids. We cannot imagine here in America how a great city could go about its evening business and pleasure without lights. We are accustomed to avoid the streets which are even dimly lighted and to frequent the brighter streets for both comfort and safety. Great improvements have been made in recent years in the lighting of the city streets, as will be told in the next chapter. Not only do brightly lighted streets have a minimum of accidents, but they are also the greatest aid to the police in protecting our lives and property from the evildoers who “love darkness rather than light.”

Department of Weights and Measures.—There is a special class of evildoers bent upon depriving us of our property which has another part of the city government to attend to it—the Department of Weights and Measures. When the department was started in 1913, the inspectors went all over the city examining the weights and measures used in stores and markets. The results were so astonishing that they held an exhibition, in the pavilion in City Hall courtyard, of the false weights and measures which they had confiscated. There were peck measures with false bottoms in them to decrease the size, scales which were weighted on one side so as to weigh more than they should, pint milk bottles which held much less than a pint, and many others. It is well to have one's own scales and measures to test the quantities of things bought, and anyone may take them to the office of the Department in the Parkway Building

and have them tested. However, one can always ask the dealer to show the stamp of the Department of Weights and Measures on those which he uses to be sure that they have been approved. The law requires that all measures must be so marked. Even the milk bottles must have a statement of the exact contents blown into the glass, where anyone may see it. Standards of measurement for the whole of the United States are kept by a Bureau of Standards of the Commerce Department at Washington, where all local "viewers of weights and measures," as ours are called, may verify the standards which they use.

The inspectors of weights and measures are not under the Department of Public Safety, where they would seem to belong. The law of 1913 made them a department of the county of Philadelphia under the City Commissioners, thus increasing the confusion already existing because of our curious double government.

The Courts.—All of the means for the protection of life and property which have been described are established by the laws of the city, the state, or the nation. The police, the fire marshal, the elevator inspectors, and all the other officers are engaged in enforcing these laws. What happens to the person who refuses to obey the speed regulations, to maintain a safe elevator, or to install fire escapes? He is arrested and taken to court, where his case is tried, and if he is found guilty of breaking the law he is sentenced to pay a fine or to be imprisoned as the case may require. The final power of any of these officers to enforce the law depends then upon the courts. If the courts do not condemn the offender, the officer of the law is powerless. So important is this last resort for our protection that a whole chapter (XIV) has been devoted to it.

CHAPTER VII

THE LIGHTING OF THE CITY

The Beginning of Street Lighting.—The lighting of the streets of Philadelphia by the city government, like so many other good things in our city, seems to have had its origin in the clever and active brain of wise Benjamin Franklin. It appears to have been largely owing to his efforts that the city passed an ordinance in 1751 "for establishing a night watch and for enlightening the city." Oil lamps were placed at regular intervals. Thus we see that it was realized then as now that lighting of streets was a quiet and certain ally to the police in securing the safety of the city by night.

By 1802 it was urged that the streets would be safer for night travel if they were lighted by gas, which was then beginning to be used in some European cities as an illuminant. There was violent opposition from many citizens to this new method of lighting, and for more than a generation fear of it was so strong that no improvement in lighting was made. In 1835, after an investigation of methods used in European cities, Councils passed an ordinance for the construction and management of the Philadelphia gas works.

The Gas Trust.—In 1836 these works were completed and the public streets began to be lighted by gas. The capital to construct the works was raised by private subscription, but the ordinance provided that the city might at any time arrange to pay back the money and become

the owner of the works. Select and Common Councils were each to elect six members of a board of twelve trustees to construct and manage the works and to make annual reports to Councils. In 1841 the city took over the gas works, but the trustee system was continued. So Philadelphia became one of the first of American cities to practice municipal ownership of a public utility. By this we mean that the city itself owned and operated a service which was useful to all the people.

The experiment was not successful. For many years the gas was of a very poor quality and was uncertain in its delivery. At the time in the evening when most gas was needed the pressure was so weak that some houses could not get light at all. This was due to the small size of the pipes, which were not large enough to carry the volume of gas needed. For the poor gas and poor service the people paid a very high price. As late as 1887 they paid \$1.40 for a thousand cubic feet, and this was in spite of the fact that the expense of manufacturing had been much decreased in all cities by the use of new inventions. Too many men were employed. Money which was paid for gas was not used to provide larger and better pipes or to renew machinery when it grew old, but was diverted to other purposes. What was called by-products of the making of gas—that is, the left-overs, such as coke, tar, and ammonia—were not sold profitably and the money saved for the improvement of the service, but were allowed to go to favorites for small prices. All of this bad management was the fault of the people of Philadelphia, of course, because they did not keep charge of their own government and see that things were done properly. In 1885 the people

did wake up, under the leadership of a group of men called the "Committee of One Hundred," and secured the passage by the Legislature of a new city charter called "the Bullitt Act." By this charter the gas works were placed under the management of the Department of Public Works, and a city ordinance was then passed creating a Bureau of Gas to take charge of the business.

The Bureau of Gas—Under the new arrangement extensive improvements were made immediately. The amount of gas produced in a day was increased, the quality of the light was much improved, and the cost was reduced to eighty-nine cents per thousand cubic feet. Over 800 unnecessary employees were discharged. But after the first burst of reform, things became gradually almost as bad as under the gas trustees. The same evils as those mentioned above appeared again.

Lease to the United Gas Improvement Company.—At the end of ten years of city management the condition of the gas works was so bad that it would have required many millions of dollars to bring it back to a high standard. In September, 1897, the Mayor suddenly sent to Councils an offer from the United Gas Improvement Company to rent the gas works, which was accepted before the people fairly realized what was being done. So the gas works which belonged to the people were rented for a period of thirty years to a private company to operate for its own profit. Under the management of the company the old works were thoroughly repaired and renovated, businesslike methods were introduced, a better quality of gas was furnished, and the service was improved in every way. The experience of Philadelphia would seem to prove that a city cannot run its own gas

works, but in many cities the plan has succeeded and perhaps when the thirty years are up the city may know better how to manage its affairs.

The terms of the gas lease by which the works were turned over to the U. G. I. are briefly as follows:

1. The lease was for a period of thirty years (until December 31, 1927).

2. The city was to receive \$10,000 annually from the company towards the payment of the expenses of the Bureau of Gas.

3. The company agreed to supply gas of at least twenty-two candle power or to pay the city a penalty of \$500 for each day it failed to do so.

4. The Chief of the Bureau of Gas (called Inspector of Meters) was to test all the gas.

5. The company agreed to supply the city, without charge, gas for the lighting of public buildings, and for all the street lamps in use at the beginning of the lease. It also agreed to supply 300 new lamps each year.

6. The price of gas was to remain at \$1.00 per thousand cubic feet, but the company agreed to pay out of this 15 cents to the city until 1913, then 20 cents till 1918, then 25 cents till 1928. Thus the city was to get an increasing tax on the sale of gas.

7. The company promised to spend at least \$15,000,000 in improvements before the end of the lease.

8. The city might, at the end of the first ten years, take back the gas works if it chose to do so, provided it paid for all of the improvements made by the company.

9. At the end of thirty years the works were to be returned to the city without cost.

A fuller statement of this lease may be found in the Manual of Councils.

The promises made by the United Gas Improvement Company seem so fair, and its service has been so good, that it is a little hard to see why some people say that the city made a great mistake in renting the gas works. The reason is that the business is very profitable, and these people would like to see the profits go to the city to be used in reducing the price to consumers.

The first ten years expired in 1907, and the city could then have taken back its property; but, alas, there was no money to pay the bill. The company tried in 1905 to get the city to extend the lease to seventy years, but this time the people were awake to the meaning of the lease and objected so strongly that Councils refused.

As was shown in the terms of the gas lease, the city is really taxing the people through the price of gas. At present everyone is paying \$1.00 per thousand cubic feet of gas, but of this the company returns twenty-five cents to the city. This brings to the city a tax revenue of more than \$1,000,000 every year. If the city would give up that money the people might have eighty cent gas, and the city Councils have the power to decide to do this. The trouble is that if that money were given up the people would have to be taxed in some other way to help meet the city's expenses. Some people think that another kind of tax would be better because this bears more heavily on the poorer classes of people than on the well-to-do.

Electric Lighting.—In 1881 a new form of lighting was introduced, electricity, which soon began to replace gas for street lighting and then was used extensively in the

homes of the people. The Philadelphia Electric Company put up the first street lights in that year and has ever since done a rapidly increasing business for the city. Here we have a case quite different from that of the gas works. A private company started the business itself and gradually secured the city for one of its biggest customers. Electric lights have proved so superior for street lighting that gas has been abandoned entirely on the larger streets. We have no long-term agreement with the electric company, but buy electricity by contract for a year, just as we do coal for heating the public buildings. The law requires that in buying anything the city must ask for bids and then give the contract to the company making the lowest bid. When bids are made for coal there are usually several companies offering to supply us. When bids are made for electricity there is always only one company bidding, the Philadelphia Electric Company. The reason can easily be found. To offer to bid, another company would have to invest millions of dollars in wires and poles and machinery. The Philadelphia Electric Com-



ELECTRIC LAMP ON BROAD
STREET

pany, since it has its equipment already, has a monopoly of the business in Philadelphia.

In 1913 the Director of Public Works began to investigate the prices paid for electric lights in other cities. He found that while Philadelphia was paying an average of \$84 per arc light, Chicago was paying \$75, Cleveland \$49, Detroit \$46, Toledo \$45, St. Louis \$49, Spokane \$48. He asked the Philadelphia Electric Company to reduce its prices but it refused. In that year the State Legislature passed a law creating a Public Service Commission. This is a body of men appointed by the Governor, whose duty it is to protect the interests of the people against unjust treatment by the companies which supply light, water, telephones, and transportation. The Director appealed to the Commission to decide whether or not the electric company was charging too much for its services. At intervals for nearly two years lawyers representing the Director and the company argued before the Commission. Experts were brought from other cities to tell of the cost to produce electricity and the price charged elsewhere. In the end, the company saw that the case was going to be decided against it and agreed to adopt a lower scale of prices. By this agreement the city saves on its street lighting about \$100,000 a year. Lower prices were made for all consumers, and the people of Philadelphia were saved altogether about \$1,000,000 a year. The company profited too, for its business increased at the lower rate. During the war, however, the Commission granted temporary permission for an increase in some of the rates.

Gasoline Lighting.—There is still a third kind of lighting in use in the city streets, and that is by gasoline.

These lights are placed in back streets and alleys where there are no gas mains or electric light wires. Gasoline lights are expensive and old-fashioned. Philadelphia is behind the times in using such a light. They are now being reduced in number and it is to be hoped will soon disappear.

Cost of Lighting.—In 1915 the city paid over \$2,000,000 for lighting, and that does not include the gas lights which are furnished free by the U. G. I. This money went for electric lighting of the streets and public buildings to the Philadelphia Electric Company, for gasoline lights to the Welsbach Company, for extra gas lights to the U. G. I., and for gas lights to the Northern Liberties Gas Company. The last-named company was founded before the consolidation of the city, to supply light to the district north of what was then the city. Its charter of 1844 gives it the exclusive right to supply gas to the Eleventh, Twelfth, and Sixteenth Wards, but it is bound by no duties to the city such as are found in the contract with the other gas company, which is said to control it. It will be seen that our light business is a big one and rather complicated.

City Bureaus.—There are many confusing things about the government of Philadelphia which ought to be simplified when we get the new city charter, which is so much talked of. Nothing needs rearranging more than the care of the city's lights. Three bureaus now divide it. The Bureau of Gas, which once had full charge of the city gas works, has nothing to do but test the gas to see that the U. G. I. provides gas of a proper quality and settle disputes over bills between the company and its customers. The chief is called Chief Inspector of

Meters. The Electrical Bureau has for its principal work the maintenance of the fire alarm and police telephone system, and the telephones for all the city departments; but to this it adds the supervision of the electric lighting done for the city by the Philadelphia Electric Company. The Bureau of Lighting, which by its name would seem to have all the work to do, is only concerned with the supervision of the placing of the new lights in proper places throughout the city. To make things more confusing the Bureau of Gas and the Bureau of Lighting are in the Department of Public Works, while the Electrical Bureau is a part of the Department of Public Safety. The Chief Inspector of Meters and the chiefs of the other bureaus confer about their work, but it would be so much simpler to have it done by one bureau as well as cheaper for the taxpayers of Philadelphia.

In spite of the fact that the lights are all supplied by privately owned companies there is a great deal to be done by the city bureaus. The contract of the Philadelphia Electric Company states that it is liable to pay fines for allowing the street lights to be out. The lease to the U. G. I. requires that each street light shall be equal to twenty-two standard candles in lighting power. Otherwise the company must pay a fine for each weak light. It requires a good deal of work for the light inspectors to keep track of these failures of the three lighting companies. The gas and gasoline lights must be tested according to a method prescribed by the contracts, and this requires a great deal of scientific knowledge. There is the question too of the kind of light provided. The city officers not long ago persuaded the gas company to put incandescent mantles on its lights, and to

replace thousands of gasoline lights by gas lights. About the same time it was brought to the attention of the electric company that they were using an old-fashioned arc light which had been discarded by other cities. Since then powerful modern lights are being gradually installed at the company's own expense.

Lighting for Civic Beauty.

—City Hall is beautifully lighted at night. The ring of twenty-eight ornamental lamp-posts around the building, each bearing a cluster of twenty-eight lights, commemorates the twenty-eight districts which united with old Philadelphia to form the present city in 1854. These lamps were established in the year of the great celebration of the founding of the city (1908). Each is a monument to one of the old districts and bears its name and seal upon the base. High above the ring of lights rises the tower, shining with the reflected glow from great batteries of lights concealed at the corners of the roof. Highest of all, the statue of William Penn shines above a circle of arc lights. On every holiday



ORNAMENTAL LAMP, CITY HALL
SQUARE

At the base of each of these twenty-eight lamp-posts is an inscription bearing the name of one of the districts consolidated with the city of Philadelphia in 1854.

occasion or when some convention comes to Philadelphia, the Electrical Bureau exercises its ingenuity in ornamenting the hall with great colored designs to celebrate the occasion. These are usually over the four main entrances. Great improvements have been made in recent years in the electric lighting of our main thoroughfares. The brilliancy of the lights has been increased and an ornamental type of poles adopted. The finest of these new poles are those in the center of Broad Street.

Gas and Electricity in the Home.—So far we have been speaking only of the public use of gas and electricity. Probably every one is much more interested in their use in the home. No woman who has used a gas stove returns willingly to a coal range. If the housekeeper is so fortunate as to have an electric vacuum cleaner she would consider it a great misfortune to have to go back to sweeping with a broom, with all its accompaniments of dust and confusion. The reduction in the prices of gas and electricity make possible all sorts of appliances to render housekeeping pleasant and easy. It seems likely that in the homes of the future coal will not be used at all. It is a nuisance from the time that the delivery wagon spills black dust over the pavement and cellar to the time when the ash man gives a coating of gray to the premises in removing the waste. If gas can be produced cheaply enough it will be much better to heat our houses and cook our food with it. At the same time the use of electric appliances is following closely behind the use of gas. The time may come when we shall do our cooking and heating, as well as our cleaning, by electricity. Both improvements are going to make our homes much pleasanter to live in.

Cheaper Gas and Electricity.—At present the high prices prevent many of us from taking advantage of these comforts. So all Philadelphia is interested in the prospect of the reduction of prices. There are several ways in which this reduction may come about. Scientific men are constantly discovering new methods of manufacture which tend to make production cheaper. In the second place, the public utility companies are showing greater willingness to reduce prices because in this way they secure more business. Thirdly, the state now has a Public Service Commission which has done us good service in showing that the electric rates should be lowered and is likely to help in other matters. As a last resort, Philadelphia could do as many other cities have done and supply itself with both gas and electricity. In that case profits could be cut out and the people served at cost. Whatever the future may bring, the people of Philadelphia are going to be much interested.

CHAPTER VIII

THE PUBLIC SCHOOL SYSTEM

The educational opportunities of a great city like Philadelphia are almost endless. Besides the numerous libraries, museums, art galleries, and theaters, there is the educational work conducted by the churches, by social settlements, by great industrial or commercial establishments. There are schools for the blind, the deaf, the feeble-minded, the incurable. There are private or semi-public institutions of all grades, from the private kindergarten to the business colleges, the Y. M. C. A., the School for Social Service, Temple University, and the University of Pennsylvania. Then there is the system of parochial schools, with its ninety elementary parish schools, its high school for girls and its two high schools for boys, with a total attendance of over 75,000. And finally, there is Girard College, city-owned and controlled, with its 1,600 pupils and its splendid working income of \$1,000,000 a year.

The educational facilities named above deserve far more than a mere mention—an entire chapter would utterly fail to do them justice. But they must all be passed over, because this book is primarily concerned with public institutions; and the public school system of Philadelphia is so extensive and so complicated that it needs the whole chapter for even a brief description of it. In 1918 the system celebrated the centennial anniversary of its founding. And in commemoration of that event

the Superintendent of Schools wrote a historical sketch in booklet form, to which the reader is referred for many interesting facts and figures.

Perhaps nothing could afford us a better idea of the wonderful growth of the city than to learn that when its public school system was organized, over a hundred years ago, it had six schools, ten teachers, and less than 3,000 pupils, on each of whom it spent on the average about \$3.50 per year; whereas now it has over 200 schools, housed in some 350 buildings, more than 6,000 teachers, and about 230,000 pupils, on each of whom it spends on the average nearly \$40 per year—or, based on average daily attendance, about \$50.

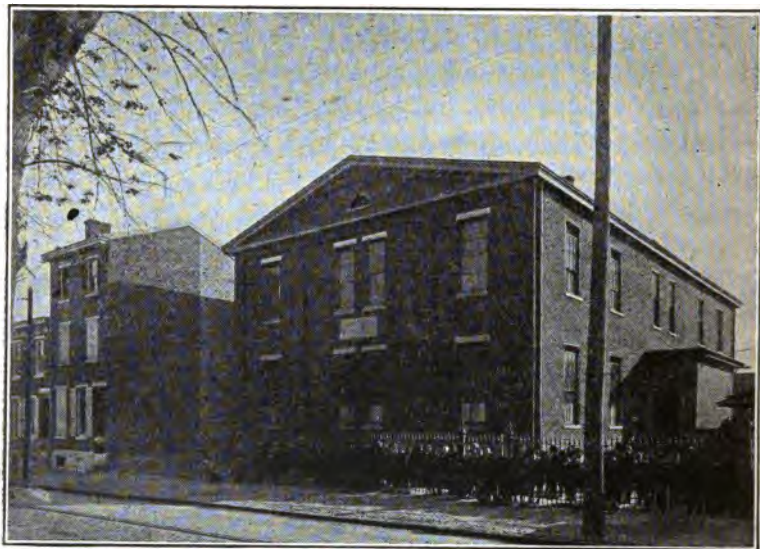
An even more interesting comparison is one that contrasts the school of a generation ago with the school of to-day.

The School of a Generation Ago.—A generation ago the Philadelphia elementary schools, like those of most other cities, were housed in small, dark, badly ventilated fire-traps of buildings. There were usually no corridors, the class rooms being packed tightly together so that many of them could be reached only by passing through others. There were no fire escapes and rarely any fire drills; and yet the inside structure was altogether of wood, and the heating apparatus gave no sort of guarantee against trouble from fire. Two small windows in each class room were regarded as ample to let in the light, even when, as was usually the case, adjacent buildings were so close as to shut out much of the light and all of the sunshine. The playgrounds were so small that real play was almost out of the question, and play apparatus was unknown. The toilet facilities were inadequate and

the general sanitary conditions were often a menace to health. A number of these old buildings are still in use, but they are being modernized as rapidly as possible.

So much for the equipment. The course of study was equally lacking.

The "three R's" were pretty well done, with an



AN OLD SCHOOL BUILDING

amount of drill that was valuable for the younger pupils. But unfortunately there was little else for the older pupils to do except some drawing, some formal grammar, some physiology which was largely anatomy, some routine history usually memorized from the text book, some geography taught in much the same fashion, and a memorized study of the United States Constitution that was perhaps worst of all. However, there were

capable, devoted teachers, and the boys and girls received much of real education.

Turning to the high schools, we find two decently equipped schools, one for boys and the other for girls, with teachers many of whom had had college education. The work done in these two schools compared favorably with that done in any of the leading high schools of the country.

But district high schools were hardly dreamed of, and the young people of southwest Philadelphia or Germantown or Byberry had to take long horse-car rides to reach one of the high schools. So there is no wonder that the number of pupils who even entered high school was very small, and that the number of those who graduated was still smaller. Two additional manual training three-year high schools, one of which was near the other high schools, helped matters some for the boys. The girls could shift for themselves.

The School of To-day.—Let us call this the nineteenth century school, and then set over against it the school of to-day, which we will call the twentieth century school.

Elementary School: Appearance, Cost.—The up-to-date elementary school building is an ornament architecturally, set in the midst of spacious grounds, and costing in the neighborhood of \$8,000 per class room, or from \$100,000 to \$300,000 according to size.

Fireproof Construction: Corridors, Stairways, Fire Escapes.—Our new buildings are as near fireproof as they can be made, with their cement floors and stairways, steel ceilings, and slate or slag roofs. Moreover, they have broad, well-lighted corridors passing every room, and either duplex fire escape stairways or enclosed fire towers.

Lighting, etc.—The class rooms are beautifully lighted, and always from the left side of the pupils. These rooms fully comply with the requirement of the School Code (1911) that the total light area must equal at least twenty per cent of the floor space. The additional requirements of fifteen square feet of floor area and 200 cubic feet of air space per pupil in each class room are also met in the newer school buildings.



MODERN ELEMENTARY SCHOOL

Heating and Ventilation.—The heating and ventilating system installed in these new buildings is a triumph of engineering skill. The legal requirement for class room ventilation is the delivery into each room of at least thirty cubic feet of fresh air per minute for each pupil. This air supply is provided by the “plenum” system, which keeps the volume of air constant while the temperature is raised or lowered to meet weather conditions.

The air is taken in at or near grade and passes first

through the primary heater (see diagram), in which its temperature may be raised from 0° to 40° F. The second stage is the air washer, in which the air is properly humidified and ninety-eight per cent of all suspended matter is eliminated. From the washer the air passes to the secondary heater, where the temperature may be raised to 90° F. The fresh air is moved by the usual type of "steel plate" fan (driven by engine or motor) through ducts and vertical flues, and is delivered into the rooms at about nine feet above the floor, the flues being on the inside walls and delivering air towards the windows.

This "plenum" system is supplemented by the use of radiators

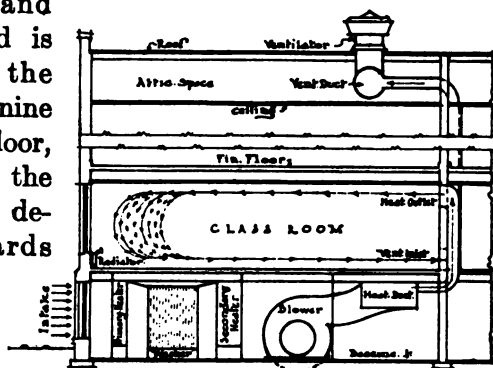


DIAGRAM OF HEATING SYSTEM

in each room, the quantity of this radiation being sufficient to offset the heat losses through the walls and windows. These "direct" radiators are under automatic control, through the use of the thermostat.

The ventilation is through vertical flues, grouped with the heat flues and of the same size, the intake of foul air being at the floor level. These vent flues continue up to the attic or loft space and connect through ducts with the ventilators above the roofs. Each room has its independent flues for both heating and ventilation, and the heaters are built in groups or sections, each group

being controlled by valves in the steam and return pipes. From this it will be seen that the modern system of school heating and ventilation is one of great flexibility.

Class Rooms.—In the individual class rooms we find an amount and variety of equipment that would be amazing to a Rip Van Winkle who went to sleep a quarter of a century ago. In addition to the text books furnished each pupil, Rip could see helpful maps and charts, reference books, material for cooking and sewing as well as for manual and shop work, museum collections, pianos, phonographs, stereopticons and slides, perhaps even moving pictures. He would find assorted sizes of seats and desks, special rooms for kindergarten classes, play rooms in the basement. For the physical side there would be play apparatus and the equipment for organized athletics. In a very few of the schools he would discover fine assembly rooms, now in constant use for various purposes, and in many of the schools pleasant administrative offices for the principal and the clerical force. All of this goes to make up the complete modern elementary school.

Secondary School.—The district high schools have as much of the foregoing equipment as they have need for, together with laboratories for biology, chemistry, and physics. Some of them have, in addition, a well-stocked reference library with a trained librarian in charge, as well as a liberal supply of maps, charts, filing cabinets, and other necessary aids to more advanced instruction. In addition, they have rooms equipped for the teaching of industrial and commercial branches.

All this is more expensive than the outfit of an elementary school, the classes are smaller on the average,

and the salaries of the teachers higher. As a result, the yearly per capita cost of running a high school is three times that of an elementary school. The new junior high school will be the connecting link between the two.

Activities.—Coming now to the school activities, we find that they include both book work and hand work; and that in addition they are planned not only for mental



A MODERN HIGH SCHOOL

and moral development, but for physical growth as well. Fortunately the sharp distinction between the elementary and the secondary schools is being broken down; and the coming of the junior high school will hasten the arrival of a unified school system.

Revised Courses of Study.—During the last few years the courses of study that had come down as a legacy from the nineteenth century have been undergoing careful revision. Arithmetic, hygiene, civics, history, English, geography—all have been or are being worked over most

painstakingly by committees of superintendents, principals, and teachers, with the design of fitting them more perfectly to the changing needs and the new educational ideas of the century. A few examples will help to illustrate the new point of view.

The revised course in physiology and hygiene provides for the teaching of correct habits of cleanliness, of eating and drinking, of posture and breathing, and of habits which prevent contagion. The emphasis is placed upon bodily function and care, rather than on bodily structure, which is relatively of much less interest and value to the child.

Civics has really become a new subject in the curriculum, as the formal study of the Federal Constitution which the new course has replaced was too brief and too abstract to touch the life of the boy or girl. The present course extends throughout the eight years of the elementary school, and has for its aim the making of good citizens. This it hopes to accomplish both through habit formation and through ability to coöperate with others in the rendering of service to the community. Dependence, interdependence, service, coöperation—these are the lessons that must be learned by the young citizens of the class, and this is the training in citizenship that the eight years of civics is trying to give.

The Kindergarten.—Less than a hundred years ago Froebel established the first kindergarten or school for little children. The kindergarten of to-day follows closely the lines laid down by this educational pioneer, with its combination of play, hand work, song, and story—all helping to acquaint the child with the world around him and to bring him into harmonious relation to it. The

different seasons of the year form a background to the games and songs, while the most prominent holidays are made the occasion for simple festivals, to which the parents are invited. Social virtues such as kindness, courtesy, and fairness are developed, and interest in the simple trades is stimulated by songs about the carpenter, the baker, and others. There are about 275 public kindergartens in Philadelphia.

Music.—One of the earliest of these welcome additions to the “three R’s” was music. Sight reading, extending even to four-part singing, is supplemented by the singing of rote songs to develop musical taste. In addition to the class room work, school orchestras, glee clubs, and choruses give added experience in sight reading and in musical interpretation.

Drawing.—In the drawing department the pupils first use colored crayons and pencils, drawing both natural and artificial objects. In the grammar grades water colors are introduced. The boys and girls learn to decorate the articles they make in their hand work periods, such as posters, portfolios, and book covers. Later on, the boys are taught constructive drawing in connection with their shop work. Throughout the course the aim is kept in view to train the young people to see the difference between the beautiful and the commonplace, and to take a keen enjoyment in works of art.

This is particularly exemplified in the Public Industrial Art School, at Park Avenue and Master Street, to which hundreds of grammar school boys and girls find their way for one afternoon each week. Here they receive careful instruction in drawing and design, clay modeling, and wood carving. Many of those who enroll work

faithfully for two years to obtain the coveted diploma of the school.

Industrial Hand Art Work.—Coming back to the regular elementary school work, we find that the foundation for the industrial and domestic arts is laid in the elementary hand work of the early grades, where the boys and girls get their first ideas of form and structure through paper folding, cutting, pasting, and decorating. Accuracy and neatness are insisted upon, as fundamental to good work later on.

When the boys reach the fifth grade they begin the use of more difficult materials, such as wood, textiles, and metals. Care is taken that hand work projects shall be within the constructive ability of boys of the fifth and sixth grades. Work such as the following has met this requirement: weaving of rag rugs; testing of fabrics; bookbinding and repairing of school books; making of toys, bird boxes, flower boxes, book racks.

Much information is woven into the course concerning business conditions and practices, for it is planned to give the boys both a valuable industrial training and an industrial viewpoint for the future. It helps the pupils, especially those who are soon to leave school for work, to answer that all-important question, "What am I to do?" To further this aim the hand work of the sixth grade is correlated with the course in industrial civics for that grade.

Industrial Art: Shop Work.—From the hand work of the fifth and sixth grades the boys advance to the shop work of the seventh and eighth. There are now about fifty elementary school shop centers in Philadelphia where instruction in shop work is given, one-half day

each week, to the boys of the seventh and eighth grades. A shop center is a specially equipped workroom in a grammar school, in charge of a trained teacher, to which the pupils come from neighboring schools. The boys construct various articles of wood, using the common wood-working tools, and in addition they are given simple



A WOOD-WORKING CLASS

problems in wood finishing. The projects made consist of articles for the boys' homes, for themselves personally, or for the schools.

The activities of the shops are made as practical as possible, and instruction is given by teachers chosen for their position because they are practical journeymen mechanics possessing executive and teaching ability.

The shop work, as carried on in the schools to-day, affords the boys several vital benefits: first, a back-

ground of experience which gives added meaning and interest to their class-room studies; second, the opportunity to do practical and useful work, thereby stimulating self-appreciation and a spirit of manliness; and third, valuable information about industrial conditions and practices.

Domestic Art: Sewing, etc.—When the girls reach the fifth grade they start to learn the use of the needle—a more precise tool than crayon or pencil or shears. Beginning with towels and handkerchiefs, they progress to simple garments and finally to shirtwaists and dresses. In making these garments the girls learn to use commercial patterns and to draft their own. Mending and darning are also taught. With each lesson there is a short recitation period, in which the pupils describe in correct English the work of the day. The aim of the course is to develop girls mentally as well as manually, and to prepare them to be intelligent, skillful, and practical home-makers.

Domestic Science: Cooking, etc.—When the seventh grade is reached the girls enter upon another phase of their preparation as home-makers, for they start on a two years' course in domestic science. The sequence of lessons is based upon the nutrients, or food principles. Beginning with starch, as found in cereals, potatoes, and other vegetables, it follows with the use of flours and the principles underlying leavening agents. Later, instruction is given in the cooking of protein foods, such as eggs, milk, cheese, fish, and meats. In the eighth grade balanced rations are taught in a simple way, having meals cooked in illustration of the principles studied. The course also includes food preservation and

food conservation, two subjects of special interest in time of war.

An eighth grade girl comes to appreciate the importance of the weekly wage. This is evidenced by the discussions on housing, on economy in food and clothing, and on the right use of leisure time, as well as on the



A COOKING CLASS

various kinds of savings, such as life insurance and building and loan societies. It is to be regretted that the boys are not included in the above instruction.

School Provision for Handicapped Children.—Attention must be directed to those less fortunate children—of whom there are several thousand in Philadelphia—who have serious physical or mental defects, or who for other reasons are backward in school. Many of these children cannot get along well in the ordinary classes, and some

cannot even go to school at all as other children do. For these handicapped children special classes are provided that are suited to their needs.

There are orthopedic classes for children so seriously crippled that they cannot walk to school, or who require special attention in school. These children are taken



AN OPEN-AIR CLASS

to and from school in busses, and their class rooms are provided with adjustable desks, wheel chairs, and couches for rest periods.

There are open-window classes for anemic and under-nourished children, and open-air classes for tubercular children. Blankets, sweaters, and other warm clothing are provided, so that the children can study in the fresh air even during the winter months. Couches for use during rest periods are also furnished. Children not able

to walk to school are brought in busses, the same as the crippled children.

Backward and delinquent children are provided for in what are known as orthogenic classes. Into these are gathered the pupils who, because of bad home conditions or from mental deficiency, need a kind of encouragement or restraint they cannot get in a regular class. Specially trained teachers and small classes make this possible.

And finally, special classes in English are conducted for children of foreign parentage. Many of these children are too large or too intelligent to be placed in the lowest grades, and so are given special instruction in English to enable them to go into the grades where they belong.

Continuation Classes.—For those boys and girls who leave early to go into industry the city furnishes continuation classes, in accordance with the Child Labor Act of 1915. These classes are conducted in twenty-eight elementary schools, twelve high schools, and ten places of employment. They are graded from the seventh year up. Pupils of the elementary grades receive six hours a week of academic and two hours of vocational instruction, the academic instruction being related as closely as possible to the activities in which boys and girls of that age are likely to engage. About thirty-five per cent of the young workers change their place of employment each month, and this often includes a change in the nature of their employment as well. Accordingly, instruction with specific reference to the actual employment of the young people is given only where the classes are held in some establishment.

As a rule, pupils attend school four hours a day two days in the week. There are over 10,000 pupils enrolled

in the continuation classes, three-fourths of whom are in the elementary grades. School sessions are from 8 to 12 and from 1 to 5.

Evening Schools.—Evening schools are conducted in about a dozen elementary schools, five high schools, and three buildings of the Trades School for Boys. The number of elementary buildings used varies from time to time, according to the attendance. In all the elementary schools particular emphasis is laid on instruction in English for foreigners and in preparation for citizenship. Regular courses in common school branches are also given. In the higher schools courses are given in practically all high school studies for which there is a demand, including manual and mechanical arts. The evening trades school gives specific trade instruction.

The Trade Schools.—As a part of the secondary school system of Philadelphia, trades schools are provided which furnish opportunity for boys and girls to secure special training that will fit them for a place in industry. The Trades School for Boys and the Trade School for Girls differ from one another in entrance requirements and in length and character of school course. To enter the former a boy must have completed the eighth grade, and the course is three years in length. To enter the latter a girl must have completed the eighth grade or be eligible for an employment certificate, and the course is ordinarily only one year in length.

In the boys' school the special trade instruction is supplemented by the essentials of an all-round high school course, with practical applications of each subject—English, history, civics and economics, mathematics, science, drawing, and shop work. In the second and third

years the special work in the selected trade is given, the trades including architectural drafting, carpentry, cabinet-making, electrical construction, machine-shop practice, mechanical drafting, pattern-making, printing, and sheet metal pattern drafting. In the girls' school forty per cent of the time is devoted to the study of business and trade arithmetic, industrial history, business English, civics, and hygiene. The rest of the school day is spent in trade work, which includes dressmaking, millinery, and the factory garment trades. In both schools the pupils are encouraged to read trade magazines and the standard books of their trades, and to continue their studies after they shall have gone to work. In each school trade classes are operated in the evenings for the benefit of those who are already in industry. Both schools recognize that it is becoming increasingly difficult for a young person to learn a trade in a business establishment, while at the same time employers are less and less willing to employ young people who have had no training for their work.

School Gardens.—School garden work in Philadelphia includes school gardens large and small, home gardens, vacant lots or "war gardens," Achievement Clubs in gardening, poultry raising, and canning, and the care of trees and shrubbery. The school garden was started in 1904, making it one of the first examples of such organized activity in the United States. The work aims to reach pupils of all ages, from the kindergarten to the high school. The gardens are open from April 1st to November 1st, six days a week.

Fall exhibits are held in nearly half the schools, and there is competition among the schools for the best exhibit. In the summer of 1916 a vigorous campaign

was conducted against the tussock moth. No prizes were offered, but the appeal was made on the basis of good citizenship.

Physical Training: Exercises, Games, etc.—Throughout the eight grades two aims are kept especially in mind



A SCHOOL GARDEN

in physical training: first, to counteract the detrimental effects which the confinement of school life brings to the young person; and second, to increase the elimination of waste matter from the body and so insure normal, healthy growth. All the exercises and games are selected with these aims in mind.

Besides the setting-up exercises there are athletic games of all sorts within each school, and scheduled contests between the schools, including track and field sports, captain ball, volley ball, soccer, baseball, and swimming. As a wind-up to the year's work a general Field Day is held in Fairmount Park in May, at which there are track and field contests, games, and dances. A record is kept of the scores, and the school making the greatest number of points in any group of contests is given a trophy to hold for one year.

During the summer the work in physical education is carried on through the supervised school playgrounds, the school gardens, and swimming which is taught in the public baths. Physical activity outside of school is encouraged through various outdoor clubs for boys and girls.

Medical Inspection and School Nurses.—Medical inspection of the public schools is performed by the Division of Contagious Diseases of the Bureau of Health, though the work is paid for by the Board of Education. These medical inspectors, sixty in number, go from school to school examining all children who show any symptoms of illness or who are returning to school after an absence. Any child found suffering from a contagious disease is at once sent home, and the Bureau of Health is notified. Sometimes an entire class is examined, as, for example, when one of its members is taken with scarlet fever or diphtheria.

The School Code requires that each pupil in the public schools be given a physical examination annually, in order to detect physical troubles, such as defective sight or hearing, decayed teeth, bad condition of the nose or

throat, heart disease, or some bodily deformity. A record is made of the defects found and the parents are notified by the principal.

It is right here that the work of the school nurse comes in. She not only interviews the child, but wherever necessary follows the child into the home and has an



A DENTAL CLINIC

interview with one or both of the parents. She tries to impress upon the parent the importance of complying with the orders of the medical inspector. The employment of a nurse greatly increases the number of defects corrected as compared to the number where this follow-up work is not done. Over three-fourths of the elementary schools are now covered by this service, with a school population of 150,000.

Other activities of the medical inspectors include: the vaccination of school children, when requested by the parents; the medical examination of poorly nourished, tubercular, or crippled children, and the recommendation of special classes for them; the examination of mentally deficient children, so far as it might affect their school attendance; the examination of children who apply for work certificates; an annual sanitary

inspection of the school buildings, as required by the School Code.

School Luncheons.—The school luncheon has come to be recognized as an important educational movement, and has been given proper recognition in the Philadelphia public school system by the creation of a Department of



(Courtesy of the Department of Health)

A SCHOOL LUNCH ROOM

A substantial lunch is provided at the lowest possible cost. Many children go to school without breakfast. It is the purpose of the school lunch to combat malnutrition and to discourage the purchase of improper foods from vendors.

School Luncheons. Under this department provision is made for serving an *à-la-carte* lunch during the noon recess at the Normal School for Girls, the Trades School for Boys, the high schools, and the special classes of some other schools. A morning recess lunch is served in twenty-three of the elementary schools, and to some of the special classes a breakfast is given at nine-thirty in

the morning. Supper is also provided in two schools for those attending evening classes.

The aim is to provide an opportunity for the pupils to procure clean, wholesome, well-cooked food at a minimum cost; and at the same time to teach the girls and the boys to enjoy the simple, substantial foods which should constitute the normal daily diet of every well-nourished individual.

Compulsory Education.—The School Code provides that an enumeration of all children between six and sixteen years of age shall be made annually between April 1st and September 1st. The information required is obtained by the Bureau of Compulsory Education through careful inquiry at the home of each family. The data thus secured are used as a partial basis for the apportionment of the state school fund, which in the case of Philadelphia amounts to about a million dollars. The enumeration is made primarily, however, for the purpose of securing information which will enable attendance officers to enforce the compulsory attendance law. The report for 1917 records approximately 315,000 names, representing some 150,000 homes.

In compliance with the provision of the compulsory education law the public, parochial, and private schools of the city reported to the bureau over 225,000 cases for investigation in 1917. Nearly 300,000 visits to homes and schools were made by attendance supervisors and attendance officers in order to dispose of these cases. Proper enforcement of school attendance laws in a great city requires not only forceful dealings with parents who will not send their children to school, but constructive social work among families who are unable to send their chil-

dren to school because of economic or home conditions. Moreover, the bureau must deal with the problem of the truant—the product of vicious home or street or other environmental conditions. In Philadelphia these social delinquents must be reached through moral suasion, because of the lack of a parental or residential school for their proper treatment.

The bureau is also entrusted with the issuance of employment certificates to children between fourteen and sixteen years of age who leave school for work in industries. Before an employment certificate is issued the prospective employer must state in writing the conditions of employment, and the parent must, in person, approve. Certification must be made by the school as to the completion of the sixth year, and an examining physician must certify to the physical fitness of the child for the job. Proof of legal age, in legal form, must also be produced. When the certificate is issued and mailed to the employer his written acknowledgment must be procured. Finally, arrangements must be made for the enrollment of the child in a continuation class, and a close follow-up system must be provided to deal with absentees and non-employed minors.

Placement Work.—As part of the agreement with the state Department of Labor and Industry, the Bureau of Compulsory Education in Philadelphia deals with minors under eighteen years of age seeking advice in regard to employment. Being in close touch with the various employers of juveniles through the issuance of working certificates, the bureau is well able to render this service. Applicants for work are interviewed by the Employment Supervisor and given full information about the occu-

pation for which they seem best fitted by aptitude and training. In many instances after-school and vacation employment are secured, thus enabling children to remain in school who otherwise would be forced to leave. Records of all placements are kept and an endeavor is made to follow up the children, secure reports of their progress, and, where necessary, advise or relocate them.

During the last year the bureau has been aided in this work by a private organization of the city, which is known as the Vocational Guidance Committee for Girls. Through the efforts of this committee many girls are persuaded to remain in school where there is no real financial necessity for them to leave; or, if there is such necessity, a private scholarship is sometimes obtained to enable them to stay in school. If it seems best for the girls to go to work they are helped to start their industrial life in the right way, that is, to obtain a suitable job, to enroll in evening classes, and to find healthful recreation.

Community Center.—The idea of utilizing school buildings as neighborhood centers for the people is here to stay. All over the country, old and young, men, women and children, gather in school-houses for good fellowship, for lectures, concerts, and social dancing, for classes and clubs of every description; and on election day they often utilize their school-houses as polling places.

At the Kearney School, Sixth Street and Fairmount Avenue, situated in the heart of a community numbering seventeen nationalities, the first school community center in Philadelphia has been opened. The Board of Education has given the use of the building, and an interested

group of citizens has financed the undertaking. Young and old have their classes and clubs. Lectures, dancing, music, dramatics, embroidery and knitting, and Americanization classes make up a varied and helpful program. The center is in charge of a trained social worker.

High School.—The idea of high school education in Philadelphia took definite shape in 1836, when the Board of Control authorized the establishment of the Central High School, "for the full education of such pupils [boys] of the public schools as may possess the requisite qualifications." These "qualifications" were tested by examinations that strained out all but the very best students, and even of those only a limited number were permitted to enter from each grammar school. Indeed, for a time the elementary schools were entitled to send only one pupil for each grammar division, and boys would change from one school to another in order to get the chance to enter the high school. But gradually the democratic ideal of high school education for the largest possible number took the place of the aristocratic notion of reserving such advanced instruction for the select few, and high school opportunities were widened into the present system of district high schools open to all.

The High Schools for Boys.—The high schools for boys, of which there are six, all agree in offering three courses of study: academic, commercial, and mechanic arts.

The academic course is planned primarily for the boy who expects to enter one of the so-called "liberal" professions, or at least to enter some college of liberal arts. It therefore consists mainly of languages, mathematics, science, and history.

The commercial course is made up largely of these same

general studies; but in place of the ancient languages one finds bookkeeping, commercial law, stenography and typewriting, accounting, history of commerce, and economics with practical application to money, banking, and transportation. The aim is to teach boys to think carefully, accurately, and quickly along many lines, and at the same time to lay a foundation for a business career rather than to acquire skill and proficiency along one or two lines of business practice. Accordingly, while matters having to do with the technicalities of business are introduced, they occupy a secondary place. On the other hand, while the course retains much that is in the established educational system, it tries to give it a more practical bent. A considerable number of the graduates enter the colleges and universities, but a much larger number go directly into some line of business.

The mechanic arts course appeals less to the purely intellectual than to the more practical quality of mind. Accordingly, in place of the ancient languages and of one modern language we find a considerable amount of drawing and shop work. The department has well-equipped drawing rooms; wood-working rooms with benches and lathes and power tools for joinery, cabinet-making, and pattern-making; forges with every facility for all kinds of smithing; sheet-metal shops in which work in tin, copper, and iron is done; machine shops with lathes, planers, drills, etc. The student advances through the hand processes to those of the machines, and combinations of the two, with emphasis on principles and methods rather than on the acquiring of great technical skill. As far as possible the projects are planned by the students themselves, and then these projects are worked

out in wood or metal to a final conclusion and their underlying principles demonstrated. By this method a boy is made to feel the close relation of his school work to real life work. Graduates of this course are admitted to the higher institutions on the same plane as those of the academic course. The large number of graduates of this course who are now prominent in the professions is evidence of its value and its tendencies.



(Courtesy of Rau Art Studios, Inc.)

AUDITORIUM OF A GIRLS' HIGH SCHOOL

High Schools for Girls.—The present High School for Girls has this interesting bit of history. First organized as a normal school in 1848, twelve years later it widened its scope and became known officially as the High and Normal School for Girls. Eventually the departments became separate and distinct institutions. Until 1893 the course of study in the High School for Girls was purely academic; but in that year a commercial course was added. This department grew so rapidly that in 1898 a separate Commercial High School for Girls was organized.

In 1909 the latter school was merged in the new William Penn High School for Girls, which was the first of an entirely new type of secondary school for the city—the “composite” high school.

The William Penn School offers courses to meet a wide variety of needs on the part of the different girls with varying tastes and vocational futures. In order to do this it maintains a full line of instruction in the purely academic subjects, continues the commercial course, and has added a new course in household arts. Moreover, the need has been recognized for at least a minimum of domestic science for all girls. All of the seven district high schools for girls are of this composite type except the High School for Girls, which is the only specialized secondary school in the city.

The commercial courses in the girls' high schools, as in the boys', are intended to give the pupils a well-rounded education, with special emphasis on commercial subjects, rather than to train for skill in some one or two phases of business life. And the same is true of the courses in household arts, where studies in domestic science take the place of the ancient languages and of a portion of higher mathematics.

An unexpected development of the domestic science courses has been that girls who have had this training have always found it easy to secure positions as dietitians or managers in hospitals or homes, or in restaurants. Many have gone on to advanced institutions, particularly to Drexel Institute and State College or to the domestic science course of the Normal School for Girls.

Uniform Courses of Study.—At first each high school made its own courses of study. This was exceedingly

inconvenient to pupils who transferred from one school to another. The girls' schools have now remedied this defect, in large measure, by standardizing the various courses offered. The new plan for the girls' high schools is more flexible than any of the individual plans that preceded it. For example, in the academic course only two years of a foreign language and two years of mathematics are required for graduation. In the commercial and domestic science courses no foreign language is required. The aim is to render the largest possible service to girls of widely varying needs.

Teacher Training.—Girls and boys who are graduated from the city high schools still find open to them the door of educational opportunity. The Philadelphia Normal School for young women and the Philadelphia School of Pedagogy for young men are maintained by the city primarily to fit suitable persons for teaching in the public schools. A limited number of scholarships, available in various colleges and universities of the country and in certain technical schools like the School of Industrial Art, are also awarded to graduates of high standing.

The courses of instruction in the teacher-training schools are two years in length and of collegiate grade. In both schools each student is well trained in general educational theory and practice, and also has the opportunity to develop special interests and capacities in order to prepare for specialized teaching. For example, a student in the Normal School may fit herself for teaching in kindergartens, in home economics classes, and in special classes for subnormal children. A student in the School of Pedagogy may fit himself, through his choice of electives, for departmental teaching in English, in science,

or in history and civics. In either school a pupil may receive thorough instruction for the teaching of music, drawing, and physical training.

After five years' experience in grade work qualified teachers may pass further examinations and become eligible to the position of supervising principal. An increasing number of the graduates of the two schools are completing the work for college graduation, and then passing the necessary examination to qualify them for high school instructorships.

Organization: Board of Public Education.—Now we must see how this system is organized to do the great work it has to do. In charge of the public schools of Philadelphia there is an unpaid Board of Public Education, fifteen in number, appointed by the Judges of the Courts of Common Pleas, with a secretary who gives all his time to the work and is on salary. This Board of Education is authorized to exercise powers of legislation and general control, leaving to the various executive officers the actual detailed administration of affairs. There are six standing committees of the board, through whom this control is mainly exercised.

Board of Superintendents.—In immediate charge of the schools on the administrative side there is a Board of Superintendents, consisting of the Superintendent of Schools and five Associate Superintendents, each of the associates being responsible for certain phases of the work. Besides these there are nine District Superintendents, each in charge of one of the nine school districts into which the city is divided for administrative purposes.

Board of Examiners.—Acting with this Board of Superintendents there is a Board of Examiners, consisting of

the Superintendent of Schools and a Chief Examiner, assisted by the Associate and District Superintendents and the principals and heads of departments of the high schools, whose examinations furnish the eligible list for teachers of the junior and senior secondary schools. This board also holds examinations for teachers in the elementary schools whenever the city normal schools are not furnishing an adequate supply.

Directors of Special Branches.—There are four Directors of Special Branches: music, art, physical education, and kindergartens. Other special branches are in charge of Supervisors, under the general oversight of some Associate Superintendent.

Bureau of Compulsory Education.—A Bureau of Compulsory Education not only watches over school attendance, but also conducts a placement bureau for boys and girls fourteen or fifteen years of age.

Departments of Medical Inspection and of School Nurses.—A department of Medical Inspection and one of School Nurses complete the staff on the personal side.

Superintendents of Buildings and of Supplies.—The material side is looked after by a Superintendent of Buildings and a Superintendent of Supplies. The Superintendent of Buildings prepares the plans for all new school buildings, and supervises their construction. He also plans and oversees all necessary repairs of schools. Further, he supervises the janitorial service, though he does not appoint the janitors. The Superintendent of Supplies is the purchasing agent for the Board of Education of all necessary supplies, which he furnishes to the schools as they are needed.

Board of School Visitors.—In each of the forty-eight

wards of the city there is a Board of School Visitors, of seven members, whose privilege it is to visit the schools in that ward and make recommendations to the central Board of Education. They also appoint the school janitors, who are then responsible directly to the Superintendent of Buildings and not to the local board.

Pedagogical Library.—As an aid to the teachers in all the schools a well-selected reference and circulating library is maintained, at a central location, in charge of a trained librarian. The library contains some 15,000 bound volumes, 50 educational periodicals, and 10,000 lantern slides. Books are distributed among the various school districts, as requested.

Such, in outline, is the modern school system of a great American city. Taken as a whole, it would seem to compare favorably with the other important fields of civic activity. Rightly, it would seem, the Philadelphia public school should take the lead in the training of our young citizens for lives of usefulness and power in the community.

CHAPTER IX

RECREATION

The Need for Recreation.—The need for recreation is now so well understood and so generally recognized as to make discussion unnecessary. Children and adults alike feel this human want and try to satisfy it. Labor laws in many of our commonwealths and in foreign countries are planned to secure it for those who toil at manual labor. And both public and private agencies have been organized to provide healthful, pleasurable forms of recreation.

Philadelphia is coming to realize more keenly each year that it is just as necessary for its citizens to have proper recreational facilities as it is to have pure drinking water or clean streets. How to bring the country to the city is a problem Philadelphia faced years ago, and has gone a long way toward solving. And one of its first attempts at solution was to begin a great park system.

Public Parks: Fairmount Park.—Our city has one of the largest municipal parks in the world. We are justly proud of Fairmount Park, covering more than thirty-five hundred acres of land along both banks of the Schuylkill River, and including parts of the valleys of the historic Wissahickon and Cresheim Creeks. It is under the management of the Fairmount Park Commission, composed of prominent citizens appointed by the Court of Common Pleas, together with the Mayor and other city officials. Besides its wonderful natural beauty, Fair-

mount Park has many added attractions. Among the forms of recreation it offers are boating, canoeing, baseball, tennis, bicycling, athletic contests, cross country running, hockey, and ice skating. Nothing could be more enjoyable or more instructive than a visit to the "Zoo." Every year 250,000 free tickets of admission are distributed to the children in our public schools. Another



(Courtesy of the Board of Recreation)

A DANGEROUS PLAYGROUND

Thousands of children have no place to play except on the streets.

attraction is the aquarium, which is situated on the site of the old Fairmount Water Works. Memorial Hall with its fine art collection, and Horticultural Hall with its display of plants from all over the world, are also located at Fairmount Park. Too much could not be said about the value of the park to the health and pleasure of our citizens, but because of its location many of the younger children living in the most crowded sections of our great city receive little or no benefit from it.

By the wills of Mr. and Mrs. Richard Smith, prominent citizens of Philadelphia, money was left to construct a Children's Playhouse and Playground in East Fairmount Park. Boys over ten years old are excluded. The playhouse is well equipped. A piano, victrola, books, and



(Courtesy of Fairmount Park Commission)

A RESTING PLACE IN THE PARK

games are provided. The second floor is reserved for the use of sick children under five years of age, for whom a sliding board, rocking horses, blocks, and the like are supplied. The adjoining playground is fitted with sand piles, swings, giant strides, and seesaws. The large wading pool brings enjoyment to many of the smaller boys and girls, while the tennis courts are popular with the older ones. The money left by Mr. and Mrs. Smith will

also be sufficient to build and maintain three other play-houses, which will be erected in crowded sections of the city.

Other Public Parks.—When William Penn planned Philadelphia he was careful to arrange for “four fair parks.” Two of these, Franklin and Washington Squares, were near the original settlement, but Rittenhouse and Logan Squares were on the outskirts of the city. Fortunately, as the city grew, other breathing spaces were provided. Some of our parks and squares are under the supervision of the Fairmount Park Commission, while others are supervised by the Bureau of City Property of the Department of Public Works. The Fairmount Park Commission has under its control nineteen parks besides Fairmount Park. Among these are Hunting Park, Cobbs Creek Park, Pennypack Park, Rittenhouse Square, Washington Square, Independence Square, Franklin Square, and Logan Square. The Bureau of City Property supervises over seventy separate parks and open squares located in various sections of the city. Among these are Bartram’s Garden and League Island Park. All told, our parks cover about six thousand acres.

A whole chapter could be written telling about the charming and interesting things to be seen in some of these little parks. For instance, in Bartram’s Garden in West Philadelphia one may see the old house where John Bartram, the first American botanist, lived. He built this house before the Revolutionary War, and it is to be opened to the public furnished as nearly as possible as it was in Bartram’s time. This park was the famous garden in which Bartram cultivated plants of every kind. At the other end of the city, in Kensington, there

is Penn Treaty Park, so called because it is supposed to be on the spot where William Penn met the Indians and promised to deal fairly with them in all things. A small monument tells the story. Then there is Stenton Park in Germantown, where amid lawns and flower gardens is a quaint old house where George Washington once visited. At Vernon Park in Germantown will be found a most



(Courtesy of the Board of Recreation)

PLAYGROUND IN A SCHOOL YARD

fascinating collection of old things that people used in Germantown back in Revolutionary times.

Playgrounds.—The difference between parks and playgrounds is not always understood. A park is public property intended as a resting or breathing space, a place of natural beauty. Here games may be played, but no play director is in charge of the play. A playground is any place where organized supervised play is regularly carried on. A playground is a beehive of activity and fun. There are no "Keep off the Grass" signs, but

instead there are swings and sliding boards, balls and games, swimming and wading pools—everything to make boys and girls happy, everything to help them to have a good time. Of course, both parks and playgrounds are necessary. Park development had an earlier start than had the playground movement, and has made splendid progress. But as our city has become more and more crowded, and as the tendency to live in tenement and



APPARATUS IN A RECREATION
CENTER

apartment houses is becoming more and more noticeable, we realize that together with our fine parks we must provide playgrounds. These playgrounds must be so situated as to be within reach of all. In 1907 some thoughtful men and women organized the Playgrounds Association of Philadelphia.

It is supported entirely by private subscriptions. Its purpose is to show the people of our city the benefits of playgrounds, and it tries by every means possible to improve them and to increase the number. It has even secured temporary sites and organized playgrounds in order to show the public the great need in those particular localities.

In 1911, through the efforts of the Playgrounds Association, a commission was appointed by the Mayor to visit and study playgrounds in other American cities, and to report to him what they thought to be the best plan for Philadelphia. As a result the Board of Recreation was

formed to carry out the plans that had been suggested. This board includes the Mayor and the Director of Health and Charities, and a number of appointed members who serve without pay. It is the duty of the board to plan and supervise the public playgrounds and recreation centers other than those occupying property owned by the Board of Education, and also the recreation piers



(Courtesy of the Board of Recreation)

A SWIMMING POOL AT A RECREATION CENTER

and public bath houses. The name recreation center is given when in connection with a playground there is a building suitable for gymnastic purposes, club rooms, and neighborhood meetings.

At the present time the Board of Recreation is in charge of numerous playgrounds and recreation centers, as well as of the Chestnut Street and Race Street recreation piers. Additional playgrounds are under construction. In connection with some of these playgrounds and recreation centers there are swimming and wading pools.

But not all the recreational activities are under the supervision of the Board of Recreation. In 1917 the Board of Education conducted one hundred and forty playgrounds and thirty-six school gardens, supervised a large number of "home gardens" and "community lot gardens," and provided teachers for sixteen of the swimming centers.

So it is seen that two separate agencies are engaged in the work of providing suitable recreation for the citizens of Philadelphia. All will agree that whenever possible it is better to have one directing mind in control of any big undertaking. Fortunately, however, these two boards have tried to work hand in hand. As an illustration of the way they help each other, the Board of Education sends instructors to the Board of Recreation bath houses and swimming pools, and in return when some of the public schools are opened for recreational purposes in the evening the Board of Recreation sends instructors to these schools.

Evening Recreation Centers.—In January, 1918, seventeen public schools were open at night in order to provide recreation for people living near the schools. These centers are intended for those above school age. Lectures on topics of general interest, musicals, gymnastic lessons, dramatic performances, and dances are given. The movement for opening the schools to the surrounding neighborhoods was begun in 1913. The Board of Education provides the heat, light, and janitor service, while the Board of Recreation is in charge of the various activities. The movement to use the schools as neighborhood centers, as places for old and young to gather for entertainment and instruction, is growing rapidly in

many cities. The Home and School League, a private organization which has for its purpose the bringing of the home and school into closer relationship, has done much to encourage a wider use of the school plant. Through it more than sixty associations have been formed, which hold meetings in school buildings at various times throughout the year. The attendance at these meetings is anywhere from one hundred to one thousand.

Athletic Recreation Park.—The discussion of playgrounds and recreation centers would be sadly incomplete without a description of Athletic Recreation Park at Twenty-seventh and Jefferson Streets. This center was opened November 1, 1913. It is one of the most modern and best equipped in the Eastern States. The



(Courtesy of the Board of Recreation)

A SWIMMING LESSON AT A
RECREATION CENTER

building itself is very attractive. It has two gymnasiums, one for men and boys, the other for women and girls. The first floor contains a social lobby or reception room, and six large rooms for games and reading. A circulating library of about one hundred books is open from five to six o'clock. On the second floor is a splendid auditorium seating five hundred people. Here plays are given every Saturday evening during the indoor season. Adjoining the auditorium are four club rooms, one having a kitchenette to be used when refreshments are served. In the basement are located shower baths and dressing

rooms, as well as several large play and club rooms. This building may be used by the younger children during the day, but in the evening it is open only for the older boys and girls and for men and women.

The playground is large and is furnished with all kinds of apparatus. There is a fine tennis court and even a



(Courtesy of the Board of Recreation)

A WADING POOL AT A RECREATION CENTER

wading pool for the little children. Probably the most popular feature of the center is the large swimming pool which is open during the summer months. On Tuesday and Friday it is open to women and girls and on the other days of the week the men and boys use it. The center publishes monthly a paper called the *Athletic Recreation Park Booster*, telling of all the interesting events that have taken place during the past month.

What a contrast to the little dirty-faced, barefooted boy playing in the gutter or shooting craps in some dark alley, is the happy-faced boy at an athletic center splashing in the wading pool or pitching quoits. The police lieutenant reports that arrests of persons under twenty-one years of age in this district have been reduced one-half since the center has been opened.



(Courtesy of the Department of Wharves, Docks and Ferries)

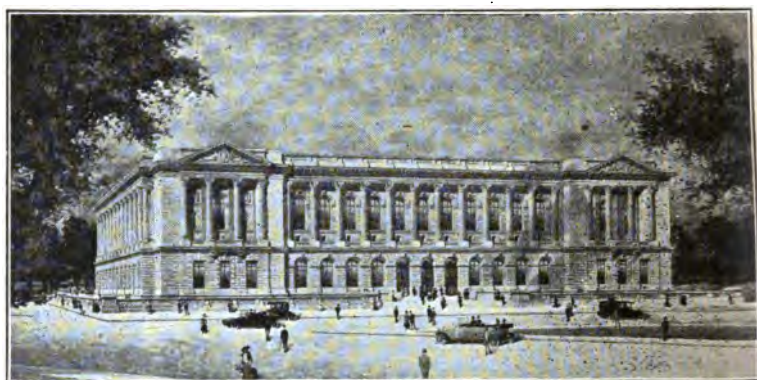
RACE STREET PIER

The upper part of this pier is used for recreation.

Play Streets.—Philadelphia has made remarkable progress in providing public recreation centers and playgrounds for her boys and girls, but much remains to be done. Few neighborhoods are properly supplied. Moreover, the centers have not been well distributed. By this is meant that in some of the more crowded sections of our city there are considerably fewer playgrounds than in other sections where there are not nearly so many people. It must be remembered that little children can-

not go very far away from home. To serve them, the playground must be within easy walking distance. Because there are not sufficient playgrounds to meet the demand, two play streets have been opened. In the summer season all traffic is banished from these streets during certain hours of the day, and they are given over entirely to the children.

The Free Library of Philadelphia.—Nothing helps one



(Courtesy of Mr. Horace Trumbauer)

THE NEW CENTRAL FREE LIBRARY

to forget about himself, his work, and his troubles like a trip to bookland. Through the pages of some interesting book he is carried far away into another world. He may become intimately acquainted with the great men and women who have lived before him; he may travel over unknown seas into regions of beauty and of wonder. He may exchange his narrow and commonplace thoughts and ideas for the broad, uplifting thoughts and ideas of some great poet or novelist. Although most people like to read, very few possess enough books to satisfy their

desire. The city authorities therefore feel it their duty to provide public libraries to which the people can go for good books of every description.

The Free Library of Philadelphia was established under a charter granted in February, 1891. It is under the control of a Board of Trustees composed of the Mayor, the presidents of both branches of Councils, and a number of appointed members. The expenses of the library are met through an annual appropriation by Councils to the Mayor, and through money bequeathed by individuals. The Free Library System consists of the Main Library at Thirteenth and Locust Streets and twenty-six branches, twenty of which occupy buildings erected from Mr. Andrew Carnegie's gift to the city of \$1,500,000 for thirty branch buildings. In all the buildings together there are over half a million volumes, in sixty-five different languages, and more than two hundred thousand pamphlets. The department for the blind in connection with the Pennsylvania Home Teaching Society, located at 204 South Thirteenth Street, is a wonderful help in providing recreation for a large group of unfortunate people to whom so many other avenues of recreation are closed. Those who wish to use their leisure time in the study of music may secure text books and music books through the Department of Music. Many people who cannot afford to buy magazines have an opportunity of enjoying them through the Periodical Department, which keeps on file over twelve hundred current magazines. Free lectures are given and story-hours held for children in the branch lecture rooms.

The plans for the future include the erection of ten additional branch buildings under Mr. Carnegie's gift,

some to take the place of buildings that are at present rented, and others to be located in neighborhoods which have as yet no library facilities. Most important of all, on Saturday, May 12, 1917, ground was broken for the new Main Building on the Parkway, facing Logan Square. This should in no way interfere with the branch libraries which serve the great mass of our people. This beautiful building, so long waited for, will furnish safe and sufficiently large quarters for the preservation and proper use of the great collection of rare and valuable books now owned by our Free Library, and for any collections we may acquire in the future. To it scholars from all parts of the city and elsewhere can go for reference material, documents, and books that could not possibly be placed in the smaller libraries.

Museums and Art Galleries.—Those interested in works of art, curios, relics, and exhibitions of all kinds would enjoy a visit to Memorial Hall in Fairmount Park, in which is located the Pennsylvania Museum. Here are exhibited works of art of every description. It was first of all intended to show the relation of art to industry. Many of the collections have been given or loaned by unselfish individuals who have felt that these treasures should be placed where every one might see and enjoy them. This museum was established in 1876 "for the State of Pennsylvania in the city of Philadelphia, a Museum of Art in all its branches." In the next year, in connection with the Pennsylvania Museum, the Pennsylvania School of Industrial Art was established "to provide instruction in drawing, painting, modeling, designing, etc." It is said that the Pennsylvania Museum is visited by 500,000 people each year.

Every Saturday afternoon during the winter, free lectures are given at the Museum of the University of Pennsylvania by prominent speakers. These are both interesting and valuable, and are well attended.

The Philadelphia or Commercial Museum, situated on Thirty-fourth Street below Spruce, contains many valuable collections which illustrate the production and commerce of all nations. Series of illustrated lectures are given here each year. There are also other smaller museums, among which ought to be mentioned the one in connection with Burholme Park. By the will of John G. Johnson, the noted lawyer who died in April, 1917, his magnificent art collection was bequeathed to the city, together with the Johnson mansion on South Broad Street, which will become a public museum. The city was most fortunate, since the collection is said to be one of the finest in the world. The citizens of Philadelphia are looking forward with a great deal of interest to the erection of the "Museum of Art," which will be one of the features of the Parkway.

Band Concerts and Parades.—Much pleasure is derived from the band concerts that are given, especially in summer time, in the public parks and squares. Sometimes a portion of a street like Broad Street is roped off and the young men and women are given an opportunity to dance. This form of public entertainment seems to be growing in popularity. Some are of the opinion that if more so-called "supervised dancing" were encouraged, the cheap dance halls would soon go out of business.

Everyone knows how much parades are enjoyed, not only by the children but by grown people as well. Broad Street is a wonderful avenue for this purpose. We have

all kinds of parades in our city. Once a year the policemen and firemen parade. It is a fine sight to see these men in their spick-and-span uniforms marching shoulder to shoulder to stirring music. But boys are even more interested in seeing the long line of fire apparatus, including hose carts, ladders, and chemical engines, all polished and shining, which is always a feature of this event. The New Year's parade is also very popular. Much of the expense of this pageant is borne by private associations, but the city offers many prizes.

Motion Pictures.—Many forms of recreation are provided by private agencies as a means of making money. To this group belong the moving picture shows, theatrical performances, operas, and circuses. The "movies" are by far the most popular, and through them many people have been able to make a great deal of money. "We have to-day in the United States more than twenty thousand moving picture theaters, and every year three billion people pay their nickels and dimes at the entrance gates. It is claimed that more than a fourth of these spectators are children." Perhaps the main reason why so many people go to "the movies" is because they are cheap and convenient.

The community exercises some supervision over the character of the films exhibited, through a State Board of Moving Picture Censors. Much that is objectionable is eliminated in this way, but public opinion does not always support the board, so that much that is questionable still appears. The educational and recreational value of the higher type of moving pictures is, of course, generally recognized.

Clubs and Associations.—There are many associations

in the city supported by individuals who are interested in providing the right kind of recreation for those who need it most. The College Settlement, at 433 Christian Street and 502 S. Front Street, is a place where college women live and conduct a kind of club house and recreation center



(Courtesy of the Board of Recreation)

FUN AT A SWIMMING POOL

for the people of the neighborhood. Among the recreational activities provided by the settlement may be mentioned the summer play yards, shower baths, occupation clubs, basket-ball clubs, and dancing classes. Some of these are for children, others for grown people. Not all of the activities are recreational; for instance, they carry on a savings bank and engage in many forms of educational work.

Activities similar to these of the College Settlement are carried on at the University Settlement, located at Twenty-sixth and Lombard Streets; at the Light House in Kensington; at the Southwark Neighborhood House, 101 Ellsworth Street, and at a number of other centers, also made possible by private contributors.

Probably no private organization does more to bring real joy and sunshine into the lives of the children of the poor than does the Children's Country Week Association, with headquarters at 1602 Arch Street. This association provides real vacations, lasting a week or longer, for several thousand adults and children who otherwise would have to remain in the hot city all summer. Ten thousand more are entertained for a day in the country. One little girl who was about to start for "Paradise Farm" for a week's outing was heard to say, "I'm looking for a teacher to take me to the free country, where you get everything for nothing." How many little hearts have been gladdened, how many little bodies strengthened, through the vacation provided by the Country Week Association!

Clubs of every variety and description for boys and girls, young men and women, which afford many opportunities for enjoyment, have been organized in our city. It would be impossible to mention all of them. We can take the Germantown Boys' Club, at 25 West Penn Street, as an example. This club, one of the finest of its kind in the United States, is supported by private contributions. It aims to make good citizens of the boys, keeping them from doing that which is wrong by giving them all kinds of things to do that are right. Among the attractions are a supervised playground, which is illumi-

nated at night, a large open-air swimming pool, which is reserved at certain times for girls, and an athletic field. The club house contains a splendid gymnasium and a number of recreation and club rooms. In the summer a camp is conducted at Ocean City.

The organization, which has done more probably than any other in the way of encouraging boys over twelve years of age to make proper use of their leisure time, is the Boy Scout Organization. As is well known, there are Boy Scouts in almost every large country in the world. The idea of brotherhood is emphasized, and it is hoped that this movement will help to promote world democracy. Those who care to know more about it should read the Boy Scout Manual. Outdoor life is encouraged: The boys take hikes and camping trips; they are taught to build camp fires, to prepare the meals for the camp, to swim, and to do dozens of other things that every boy enjoys.

Corresponding in a way to the Boy Scouts we have the Girl Scouts, and the Camp Fire Girls. Through these organizations girls are taught, among other things, ways of using their leisure time that are profitable as well as pleasurable.

Recreational Activities of the Churches.—There is scarcely a church in our city that does not give at least occasional concerts, moving picture entertainments, or organ recitals. But frequently these entertainments are enjoyed only by the members of that particular church, who are probably less in need of amusement than are the many whom the church should and could reach were it made clear that the entertainment was intended for anyone who wanted an evening's enjoyment. Some few

of the churches have what are called "parish buildings," which are not unlike the recreation centers that we have heard about. Many pastors are beginning to realize the great need for amusement of the right sort. These men want to reach and help anyone and everyone. But we do not need to be reminded that many of our churches are dark and silent at least five nights out of seven. What was said concerning the wider use of the school buildings also applies to church buildings.

The Y. M. C. A., Y. W. C. A., and Y. M. H. A.—Too much could not be said in praise of the service rendered young men and women by the Young Men's Christian Association, the Young Women's Christian Association, and the Young Men's Hebrew Association. These associations have branches throughout the country. All kinds of amusements and recreational activities are offered, as well as educational courses and lectures.

A Look into the Future.—We have every reason to believe that the cities of the future, realizing that "an ounce of prevention is worth a pound of cure," will be spending far less money on the up-keep of courts, prisons, and reformatories and far more on parks, playgrounds, swimming pools, municipal theaters, and concert halls. No doubt in almost every city there will eventually be a department of public recreation, which will be considered as necessary and important as a department of public safety or a department of public works.

CHAPTER X

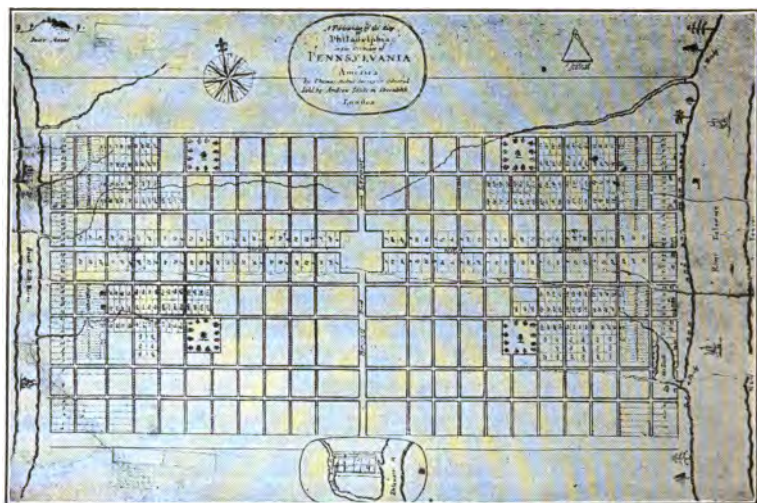
CITY PLANNING

Penn's Plan.—When William Penn and the Quakers first came up the Delaware Bay and river they were seeking a good site for a town. The spot where Philadelphia now stands was selected for two reasons: because it is here that the Schuylkill flows into the Delaware, and because this site is the first stretch of high ground to be found in ascending the river. The choice proved to be a very wise one. The two rivers gave the great stretch of water front which has made Philadelphia one of the foremost commercial cities of the United States; moreover, the high land gave a healthful, well-drained location.

Penn made what seemed then an ambitious plan for his little city. It was laid out to extend from South Street to Vine between the two rivers. There was to be one main street running from the Delaware to the Schuylkill. This was High, now Market, Street. Then about midway between the two rivers there was to be a north and south street at right angles to Market Street. This was Broad Street. Each was to be about one hundred feet wide. All the other streets were to be fifty feet wide and parallel to one or the other of these two. Penn planned for five little parks in the space between the two rivers. They are now Franklin, Washington, Logan, Rittenhouse, and Penn Squares. Penn Square, now occupied by the City Hall, was formerly called Center Square. He intended that Philadelphia

should be a "faire greene country towne." By this he meant that there should be trees growing along the streets, yards around the houses, and parks among the blocks of dwellings.

We are grateful to our founder for the good points in his plan. He was the true idealist, desiring for his



(Courtesy of the Bureau of Surveys)

COPY OF ORIGINAL PLAN OF PHILADELPHIA

people not only a haven from persecution in this virgin land, but also a home which was satisfying in its beauty. Forest and meadow were not to be replaced by dingy and narrow streets like those of the London he knew. He would "Let brotherly love continue" amidst gardens and shaded avenues. His two broad streets are still our main thoroughfares, proving none too ample in these days of dense population. Four of his

five squares remain, and are valued breathing spaces in the heart of the city.

The Faults of Penn's Plan.—Few cities were so well planned as Philadelphia in early times, but we can now see three serious faults in the original scheme. William Penn mapped all streets running north and south or east and west, on the "gridiron plan," to give the city an appearance of order and regularity. The map resembles a checkerboard. The effect was ugly and monotonous. Traffic was hindered, for movement in a diagonal direction had to be accomplished by going around two sides of a triangle. The original plan of the City of Washington, which was made a century later in 1791, was quite different. Major L'Enfant, the French engineer engaged to make the designs for the new capital of our country, took the Capitol and the White House as focal points for his scheme and made a group of spacious avenues radiate from each like the spokes of a wheel. Pennsylvania Avenue connected the two centers. The intermediate streets were on the gridiron plan, but were intersected by the radial avenues. As the city grew, other centers were to be established with other diagonal streets, so that every part of the city would be connected with the rest by direct routes. Where the avenues crossed, open spaces were naturally created, which were used as small parks. The streets of Washington are very wide, and splendid settings are provided for the fine public buildings. The plan of Major L'Enfant has been in the main adhered to up to the present time, and is considered the most complete and artistic city system ever carried out. Other cities are now adopting, so far as they can, the ideas of wide diagonal avenues and park spaces, both for beauty and for convenience.

A second mistake in Penn's plan was that of making the streets too narrow for modern times, so that now traffic is impeded and only a one-way single track trolley line can be laid on most of the streets. Chestnut Street, for instance, is becoming almost impassable for vehicles. The city before long will have to go to the expense and trouble of tearing down buildings to widen some of the streets in the business section.

A third thing which proved a mistake was making the city blocks so large that as population grew and land values increased, the temptation was great to cut them up by many small streets and alleys. This was an invitation to bad housing conditions. Many people think that Philadelphia has no housing problem because we have few high tenement houses like New York. A very little observation will show that this is a false view of the situation. In the older parts of the city we find in the center of the large blocks many small houses built on the rear of the lots of the houses which front on the streets. These houses are reached only by alleys and narrow courts. There is very little light, and the air cannot circulate through. In summer time they are insufferable, and the inhabitants are obliged to sleep on the roofs or the pavements. People are crowded together, often several families in a house meant for one, under very bad sanitary conditions. Such conditions encourage disease and crime. It is the business of the planners of our city to see that they are made impossible.

Penn's original plan applied, of course, only to the little city of his day. After his time other settlements sprang up nearby, such as Germantown, Manayunk, Southwark, and Frankford. As time went on the coun-

try between these villages and Philadelphia was settled, and it became evident that a far larger city had really grown up around the City of Penn. In 1854 the Act of Consolidation was passed by the Pennsylvania Legislature which incorporated twenty-eight surrounding boroughs and districts with the city proper. This gave to the City of Philadelphia the same boundaries as the county of the same name. These outside villages had not been planned at all, and an effort had to be made to connect the main streets of the city with those of the new districts.

In both the original city and the districts new streets were opened with no thought of lining them with trees, the yard space of the older houses was largely covered with buildings, and there were many solid blocks of houses without any land being set aside for parks. So Penn's "faire greene country towne" became an ugly crowded city.

Philadelphia's Present Plans.—Philadelphia must have many things to make it a beautiful, healthful, and convenient city to live in. The work of tearing down buildings and widening streets involves so much expense and inconvenience, and it is so important that mistakes in the future development of the city should be avoided, that the changes to be made must be carefully planned as a whole. Every progressive American city at the present time has a group of experts making designs for the city's present improvement and future development. We call this work "city planning."

It was in 1909 that a group of representative citizens came together at the request of the Mayor and authorized him to appoint a committee to study all the plans then

in existence for the improvement of the city. The suggestions which had been made from time to time by enthusiastic citizens were collected, and elaborate and beautiful designs were prepared by competent engineers in 1911. In 1912 the Permanent Committee on Comprehensive Plans was appointed to continue the work.



A BIRD'S-EYE VIEW FROM LEMON HILL, FAIRMOUNT PARK

It is to be hoped that the park treatment of the banks of the Schuylkill may be continued south of the Spring Garden Street bridge by the construction of the Schuylkill embankments.

This committee has no executive power, but the fact that it has in its membership heads of city departments, leaders in the artistic life of the city, and business men who are accustomed to doing things in a large way, guarantees consideration of its recommendations. The practical work of preparing street and other plans is in the hands of the Bureau of Surveys of the Depart-

ment of Public Works, which has done some notable work through a corps of able engineers. The plans have been changed in many respects since 1912, and so we shall consider them as they are at present.

The ideal of the committee has been "a more healthy, convenient, prosperous and beautiful Philadelphia." To secure these aims they had to consider the free and quick movement of traffic to and from the center of the city, the provision of suitable areas for business and residence, the opening of the river shores to more sea-going ships, the location of railroad terminals, more open park and plaza spaces, and artistic buildings properly situated.

1. *Traffic Circuit and Radial Avenues.*—Philadelphia's area is very large in proportion to its population, and a great part of the people spread out over its 129½ square miles want to go into the middle of the city every day. So City Hall becomes the center of many great streams of traffic. Recent years have seen an enormous increase in motor traffic, both of automobiles and of delivery trucks. The Superintendent of Police estimated in 1918 that 50,000 motor cars entered the central part of the city every day. Thus our old-fashioned narrow streets are in some places becoming so crowded as to be almost impassable.

It is fortunate that our two chief streets, Broad Street and Market Street, were made fairly wide in the beginning. Fortunately too, Philadelphia has a few radial avenues, such as Ridge, Baltimore, and Passyunk Avenues. We have these, not because they were planned, but because they were originally country roads leading out from the little city to surrounding villages. They are

always crowded with wagons and automobiles, for they offer shorter cuts to many places than the regular streets.

It is planned to improve these existing avenues, open others, and join them to a central traffic circuit. This would mean the widening of four streets so as to form a large rectangle in the center of the city—Seventh, Locust, Nineteenth, and Vine Streets. With this arrangement some of the east and west traffic could be shifted from Market Street to Locust and Vine Streets, and some of the north and south traffic from Broad Street to Seventh and Nineteenth Streets. Thus the delay and crowding around City Hall would be relieved. These wide thoroughfares would connect the four central squares, Washington, Rittenhouse, Logan, and Franklin. The district enclosed in this rectangle is the natural business center of the city. It is filling rapidly with great hotels, banks, and stores. Traffic into it and out from it is bound to increase very rapidly.

Then there are to be radial avenues, branching off at the corners of the rectangle, which would shorten the time necessary to make trips from the outlying parts of the city to the center, and relieve crowding in the narrow streets. From Franklin Square we should have Ridge Avenue running across the city in a northwesterly direction, skirting the Schuylkill to Manayunk. Another radial avenue has been planned from the same point in a northeasterly direction to the Delaware. This is called the Richmond-Aramingo route. From Rittenhouse Square we should have a diagonal street leading in a southwesterly direction, if we cut through Gray's Ferry Road from South Street to Locust. Finally, from Logan Square we should have our finest diagonal street

of all, the Parkway. This runs from City Hall to Fairmount Park in a northwesterly direction, and is rapidly being completed. Unlike the other radial avenues, which will be chiefly business streets, the Parkway is to be the civic center of Philadelphia, lined with trees and magnificent public buildings.

When the Parkway and its buildings are completed, we shall be able to stand at the northwest corner of City Hall and look across the open Plaza, along the



Drawn by J. Greber.

(Courtesy of the Public Ledger)

DESIGN FOR THE PARKWAY LOOKING NORTHWEST

Parkway to the tall trees in Logan Square. On the left will be the new Pennsylvania Railroad Station probably moved back beyond Fifteenth Street, leaving the space where it now stands as a part of the open Plaza. Then will come the Bell Telephone Building, and beyond that the Wills Hospital and the Academy of Natural Sciences. On the right will be the buildings of the United Gas Improvement Company, the Young Men's Christian Association, and possibly a new building for one of the departments of the municipal government.

If, on that future day, we walk to Eighteenth Street

we shall find the Parkway cut through Logan Square and the square much enlarged by the addition of land on the south. In the center of the square the driveway will divide, making a great circle about a central monument. Beyond the square the Parkway widens out from 140 to 250 feet, and from there we may look between the double rows of trees bordering the wide avenue to the great white marble Art Gallery with its pillared porches in the Greek style, crowning the hill called "Fairmount," which blocks the end of the Parkway. On the right at Logan Square we shall see the Roman Catholic Cathedral, while at Nineteenth Street will stand the magnificent Public Library. At Twenty-first Street there will probably be a large Convention Hall where national gatherings may meet, and at Twenty-third Street the new Episcopal Cathedral. On the left, beyond Logan Square, will be seen the "Palace of Justice" to house the city courts, and the new home of the Franklin Institute, one of the city's famous scientific societies. Possibly the Commercial Museum will have a place there also.

It is hoped that all of these new buildings will be of light stone or marble, in the classic style, and that they will be set at a distance from each other with trees and grass between. When the Parkway is completed it will be one of the great streets of the world.

2. *Local Civic Centers.*—The Parkway will be the civic center for the whole city, but in a community of so large an area as ours there should be many minor centers. If in each neighborhood the branch library, the public school, the recreation center, the sub-station of the post-office, and other public buildings front on a public square and are of harmonious design, each one

will show to greater advantage and the whole neighborhood will be benefited. All of these smaller public buildings which have been built in recent years are a credit to the city. The Carnegie branch libraries are all different, but each of a handsome modern type. The new school buildings, which should be next to the libraries,



(Courtesy of the Bureau of Surveys)

A LOCAL CIVIC CENTER

Perspective northwest from Passyunk Avenue, Gibson Avenue, and Sixty-eighth Street, showing suggested radial avenues and park spaces.

are so splendid that the Board of Education has sometimes been criticized as extravagant. But where could it be more fitting to set examples of beauty, spaciousness, and good taste than in these "colleges of the people" where the rising generation will have its ideals shaped? One of these new schools forms the best part of a "civic center." If, according to the new ideas of the use of the school house, it is open all the time for the use of the parents as well as the children, it becomes the logical

place for neighborhood gatherings. One of the best of the civic centers which has been suggested will be located at the intersection of Passyunk Avenue, Gibson Avenue, and Sixty-eighth Street in southwest Philadelphia.

3. *New Type of Street Plans.*—The local civic centers will be naturally developed as a result of the plans for laying out new streets now being used by the Bureau of Surveys. In the undeveloped sections of the city advantage is taken of the existing radial avenues, such as Gray's Ferry Road and Passyunk Avenue, and corresponding new radial avenues are mapped crossing the north and south streets. Where radial avenues cross each other there will be a circle or a park, which is a natural place for a civic center. (See illustrations on pages 209 and 246.)

The very long block, intersected by alleys and back streets, which has been a bad feature of the old street plans, is being avoided. The shorter block gives more large streets and consequently more light and air for the houses. Builders generally take advantage of the opportunity to put up houses of the new type, with grass-plots and porches in front and yards at the rear enclosed by open iron railings instead of the hideous high board fences once so common. A whole block of these open yards, with grass and flowers, makes a very attractive view.

All streets are wider than in the older sections. The city has a force of men constantly at work planting the residence streets with trees. The same kind of tree is planted for several blocks and all are cared for alike. If flowering trees were planted, the effect would be

especially beautiful. Rochester, New York, has a famous street planted with pink magnolias. One of our suburban towns is lining its streets with white dogwood trees.

Where new areas are being developed the Bureau of Surveys sometimes adopts a plan of parked intermediate streets. Before a builder undertakes a new operation



(Courtesy of the Bureau of Surveys)

A NEIGHBORHOOD BREATHING PLACE

The Bureau of Surveys succeeded in persuading the owners of this tract to give this little neighborhood square to the city.

the bureau has to plan the new streets needed. The builder is then persuaded to set aside a small park space in the center of his land. The city assumes control of this and promises to give it perpetual care. The first of these to be finished was Ringgold Square.

In the center of the city, where the narrow streets have become so congested, it is very necessary that some means should be taken to widen them. This is very difficult where the buildings are already erected. Some

years ago an ordinance of Councils required that when any new building was erected on Chestnut, Arch, or Walnut Street in the business section, or any building was altered, the front must be placed five feet further back than before. This results in a very ragged building line at present, but will finally end in a great improvement.

4. *Bridges.*—The viaducts which carry the tracks of the railroads over the city streets were formerly thought



(Courtesy of the Bureau of Surveys)

BRIDGE OF NEWTOWN BRANCH OVER THIRD STREET

An example of a beautiful and dignified bridge. Design approved by Art Jury.

a necessary evil, and only strength was considered in their construction. The recent policy of the city has been to make all bridges ornaments instead of mere obstructions to the view. One of the best of the smaller bridges is the viaduct which carries the Philadelphia and Newtown Railroad over Third Street. Our most picturesque bridge is the one which carries Walnut Lane over the valley of the Wissahickon, rising 147 feet above the bed of the stream in a single arch.

5. *The Boulevards.*—Two fine avenues included in

the comprehensive plans have already been completed. The Northeast Boulevard runs from Broad Street at Hunting Park in a northeasterly direction for seven miles, and forms part of the Lincoln Highway between Philadelphia and New York. It is a triple roadway, bordered by grass-plots and trees. Winding over the hills, it crosses two lovely little valleys, Tacony Creek Park



(Courtesy of the Bureau of Surveys)

SCENE ON THE NORTHEAST BOULEVARD

and Pennypack Creek Park, and opens up a new region for suburban homes. Several branches of the Boulevard have been planned.

On the south, Broad Street has been widened into a boulevard running from Oregon Avenue to League Island Park. The northern entrance from Broad Street is formed by the Plaza. This is a sort of park lying between Oregon Avenue and Bigler Street and Thirteenth and Fifteenth Streets. A part of this area is enclosed by a

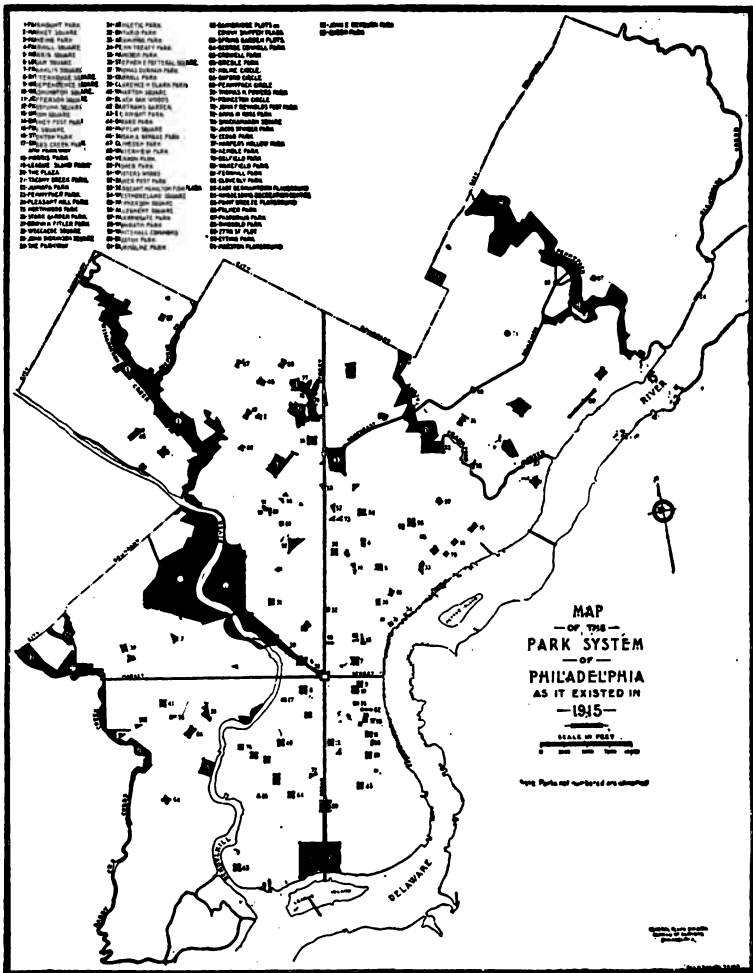
balustrade, within which there are walks and grass-covered spaces. The Boulevard runs through the center and is here 70 feet wide. From the Plaza southward to League Island Park the Boulevard is 300 feet wide, and consists of a central driveway and two service driveways, the remaining space being used for footways and tree and lawn areas.

6. *Park System.*—Philadelphia began an extensive park system in 1828 by starting to acquire the lands along the Schuylkill for park purposes. Beautiful Fairmount Park, the city's largest playground, is the result of this wise policy.

Up to the year 1888 Philadelphia had in all its vast area only sixteen small parks. In that year the City Parks Association was founded and began its efforts towards saving vacant tracts in districts which were being built up. In some cases land was presented by the owners, in some cases it was bought by the city for park purposes. Largely because of the work of this association, the number of small parks has now increased to over ninety. The addition of small parks is now a settled policy of the city government.

The city plan includes the increase of the number of parks on the borders of Philadelphia and their connection with each other and with Fairmount Park by wide tree-planted boulevards. Boston, Chicago, and Kansas City lead all American cities in the development of what is called a "Park System." We shall not be at all behind when our plans are carried out.

Philadelphia has many beautiful little streams running through picturesque valleys near its outer boundaries, and many of these have been set aside as parks. In



Courtesy of the Bureau of Surveys.

THE PARK SYSTEM

A beginning has been made in securing the valleys of the rivers and creeks for parks. In spite of the fact that Philadelphia has nearly one hundred parks, more breathing spaces are needed in the crowded parts of the city.

West Philadelphia there is Cobb's Creek Park, and toward the northeastern part of the city there are Penny-pack and Tacony Creek Parks, not to forget the beautiful Wissahickon which joins Fairmount Park. More of these valley lands should be purchased by the city in the next few years, or the real estate men will buy them,



(Courtesy of Commissioners of Fairmount Park)

A CITY BEAUTY SPOT

chop down the beautiful trees, and start to erect rows of brick houses. It has been calculated that it is actually cheaper for the city to buy the little valley creeks on our borders and keep them as parks than to go to the expense of filling in the land to the level of the streets around them.

7. *Transportation*.—Boulevards, radial avenues, and traffic circuits will be great aids to motor traffic, which is assuming such importance in all modern cities; but

the greater number of the vast throng which pours into the center of the city every morning and out again every night travel by street car or by train. Since the comprehensive plans were first drawn up a thorough study has been made of our transportation problems, plans have been adopted, and construction started.



(Courtesy of the Department of Wharves, Docks and Ferries)

HOW LAND IS BEING MADE

Mud is taken from the river and pumped into the bulkhead to build out the shore.

So vital does this matter seem that a whole chapter has been devoted to the subject. (Chapter IX.)

8. *Water Fronts.*—A study of the map of Philadelphia will show that we have a remarkably long water front. The Schuylkill is navigable for large boats only as far as the Walnut Street Bridge, but its upper course is useful for water power. The whole Delaware front is available for sea-going vessels. Few cities in the world have such an opportunity for the building of docks and wharves.

When the Committee on Comprehensive Plans made its first report, great emphasis was laid upon the development of the water front. It was recommended that the city build municipal docks and secure the rearrangement of railway lines in South Philadelphia, so as to serve better in the distribution of freight arriving at and leaving the piers.

The Committee further suggested that the project of a wide commercial avenue along the Delaware, which



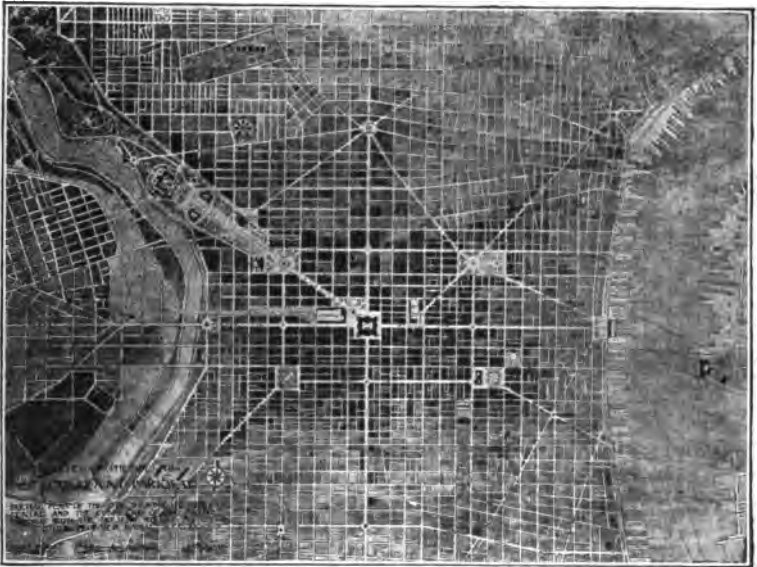
(Courtesy of the Department of Wharves, Docks and Ferries)

WHEEL FOR BREAKING UP MUD

had been considered ever since the time of Stephen Girard, be carried out without delay. More than four miles of this has now been completed, extending from Hoyt Street on the extreme south to Fairmount Avenue. Structures along the water's edge were removed and a

paved road from 100 to 250 feet wide constructed. It was odd that \$500,000 of the expense came from a bequest left by Girard for the purpose in 1831. This improvement is to be continued all the way to the city limit at Poquessing Creek. The northern portion, from Tacony upwards, is to be a boulevard passing the city property at Holmesburg and Torresdale, where the bank of the river is occupied by the Torresdale filtration works, the House of Correction, and the Home for the Indigent. When Delaware Avenue is finished it will extend for seventeen miles, from League Island to Poquessing Creek.

The city planners devoted the Delaware bank chiefly to business. Its beauty was to consist in a broad, well-paved thoroughfare and well-built docks. The new municipal docks set a high standard by their dignified and handsome style, which is being copied by the corporations which erect new docks. The Committee's



Design by J. Greber

(Courtesy of the Commissioners of Fairmount Park)

PLAN FOR THE PARKWAY AND TRAFFIC CIRCUIT

treatment of the Schuylkill was different. The lower portion was also to have municipal docks, but the upper banks were to be considered with an eye to beauty chiefly. Any Philadelphian who has visited the Riverside Drive in New York understands what can be made of a river bank. On one side are fine residences and beautiful apartment houses and on the other the

sparkling river. Winter and summer you may see hundreds of people seated on the tops of motor busses riding up and down this beautiful thoroughfare. Other hundreds are walking along the footways, or sitting on benches under the trees. Philadelphia could also have such a drive. New York, London, and Paris are cities situated like Philadelphia, on rivers, and all of these cities have laid out wide avenues along their river banks, thus adding greatly to their beauty.



(Courtesy of the Department of Wharves, Docks and Ferries)

FILLING A MUD SCOW
A Bucket Dredge in operation.

Philadelphia so far has only improved the banks of the Schuylkill within Fairmount Park. The plan is to extend the improvement south to Bartram's Gardens by constructing what are known as the "Schuylkill Embankments," or boulevards along both

sides of the river. The boulevard would be built at a higher level than the railroads and the docks, supported by steel and concrete framework. At the present time the banks of the Schuylkill between the Spring Garden Street and the Gray's Ferry Bridges present a very mean appearance and there is little shipping there. The "Schuylkill Embankment" would pass the Art Gallery at the entrance to the Parkway and so connect with that radial avenue.

9. *Business and Residential Sections: Zoning Commission.*—Every busy and growing city must have a part of its area devoted to business, a part to manu-

facturing, and a part to residences. The manufacturing area should be convenient to the railroad terminals and to the water front. The business section grows up naturally in the center of the city where the transportation lines come together. A large part of the city, however, must be given up to the homes of the people.

As the city grows, manufacturing and business districts constantly increase in size, encroaching on the older residence neighborhoods. Everyone is familiar with some section of the city where houses are gradually being replaced by offices, shops, or factories. When the Declaration of Independence was signed, Sixth and Chestnut Streets was a fashionable residence neighborhood. Now, Chestnut Street as far west as the Schuylkill is in the last stages of the change to a business street.

It is natural that the central and older part of towns should be taken by business. The newer regions, however, might in many cases be used either for business or for homes. Who is to decide? The decision has been left to chance, with results that were often not desirable. Let us suppose that an area of well-built and comfortable houses, where many residents of moderate means own their own homes, begins to be invaded by factories. These bring smoke and noise and immediately the neighborhood becomes a less desirable place to live in. The dwelling houses in this area decrease in value. The city should safeguard its residential areas, yet also make provision for new manufacturing enterprises.

Many cities have solved this difficulty by dividing their areas into districts, making provision for business, manufacturing, and residential districts. The Legislature of Pennsylvania has passed a law allowing Philadelphia

to appoint a Zoning Commission, whose business it shall be to see to this part of the city plan. The Philadelphia Zoning Commission was accordingly appointed and is at work upon this problem.

The city plan will not be complete until provision is



(Courtesy of the City Parks Association)

TREES OR WIRES—WHICH?

The wires should be placed under ground for many reasons; one is that they will prevent the growth of the trees.

made for satisfactory residence districts for people of small incomes. In the United States we are just beginning to realize that no community can prosper as it should unless its work-people are happy and healthy. Disease, crime, and inefficiency are fostered by bad housing conditions. High-grade laborers will not live in a place where housing is inadequate. American cities have been

slow to recognize this, but many business corporations have built model villages for their employees as a business measure. One such is located at Marcus Hook, near Philadelphia. Since the United States has gone into the business of making ships and munitions it has undertaken to provide good homes for its working people. Congress has appropriated many millions to build houses in several localities in the Eastern States.

In England the people have made a good start in this



(Courtesy of the Public Ledger)

THE SKY-SCRAPER DISTRICT

matter. They have begun the construction of what are called "garden cities," where small but convenient, beautiful, and sanitary houses are built among trees and gardens. The houses are either near a great industrial plant where the men work, or near a transportation line which will take them to work for a very small fare.

10. *Regulation of Buildings.*—The law says that this Zoning Commission may recommend regulations "for the location, size, and use of buildings." This is so that we may prevent the erection of the very high buildings called "sky-scrapers." If there are high buildings on both sides of a narrow street the street is very dark

and many of the rooms in the buildings are dark. Where the center of a city is occupied by such large buildings it also causes difficulty in transportation arrangements. A host of people have to come into the buildings to work about nine o'clock in the morning and go home again about five o'clock in the evening. Even with all the surface cars, subway and elevated trains, and ferry boats taking these crowds home, it is impossible to avoid much delay, discomfort, and danger.

Regulation of buildings from the point of view of the architect and artist is also very important. We know that a number of fine and appropriate buildings are to be erected on the Parkway. But if there should be even a few unsightly and unsuitable buildings erected there they would seriously mar its beauty. Fortunately a law permits our Fairmount Park Commissioners to regulate the location, size, and use of buildings which come within 200 feet of any park, parkway, or playground under their care.

We are further assured of the future beauty of the Parkway and of all other parts of the city by the powers given to the Art Jury by act of the Legislature in 1907. This body of men is composed of several citizens prominent in architecture and art, appointed by the Mayor. Plans for all buildings, fountains, sculptures, tablets, paintings, and bridges to be presented to the city or purchased with the city's money must first be submitted to the Art Jury. The approval of the jury is also required for any structure belonging to any person or corporation which shall be erected upon or extend over any highway, square, park, or any public place within the city.

These regulations apply, of course, only to new struc-

tures. It is to be wished that power could be given to compel the removal of old and unsightly objects. The general powers given to these city bodies to control buildings are not as great as the power possessed in New York, and they should be enlarged.



(Courtesy of the Bureau of Surveys)

WALNUT LANE BRIDGE

When it was built this bridge was the longest concrete arch in the world. Its span is 233 feet, floor is 147 feet above the creek.

More should be done to preserve our famous old buildings. The Bureau of City Property has completed a fine piece of work in restoring Independence Hall, Congress Hall, and Independence Square to their original appearance, even to the old colonial lamp-posts. The installation of automatic sprinklers also gives us assurance that these treasures of patriotic association and of

architectural beauty will not be lost. It would be well for the city to rescue Carpenters' Hall from its obscurity behind ugly modern buildings, and to see that it and Christ Church, the Betsy Ross House, and other precious old places are surrounded by open spaces to protect them from fire and to give them a better setting.

Metropolitan Planning.—We have seen that the city Bureau of Surveys has been making careful designs for the development of the portions of southwest Philadelphia not yet built up. Between that region and the city of Chester the country is rapidly filling with great industrial plants and suburban villages. These are growing up in an entirely miscellaneous and unregulated fashion. If Philadelphia had the power to extend her street plan to meet that of Chester this development might be made orderly, convenient, and beautiful. There is a similar need for extension toward the north and the west. In speaking of the outer park system it was suggested that Philadelphia should reach out into the surrounding country to save the valleys of the streams for park purposes. All the outlying regions should be planned with a view to a general park system. For these reasons it has been suggested that the city boundaries should be enlarged to make a greater Philadelphia, to include Bristol on the north and Chester on the south; or else that a "metropolitan area" should be created by act of the Legislature, including Philadelphia and the surrounding land for purposes of city planning.

Financing the City Plans.—It will require a great many millions of dollars to make all the dreams of a "more healthy, convenient, prosperous, and beautiful Philadelphia" come true. Thirty or forty years may

pass before we can afford to have all that has been planned. The advantage of planning is that whatever the city builds will form part of a harmonious whole.

It is not true, however, that all the expense of construction must come out of the pockets of the taxpayers. There are modern methods of making improvements pay for themselves which have not yet been tried in Philadelphia. Some of these are: assessing the costs of improvements against the properties benefited, excess condemnation and resale, and taxation of the unearned increment. These methods of financing will be explained in Chapter XVI.

Many of the improvements, such as the subway, the elevated electric roads, and the municipal docks, can be made to pay for themselves and finally yield a profit to the city.

Conclusion.—When the financial problem seems too great and we are tempted to turn aside from the vision of a beautiful Philadelphia let us remember the advice of a famous city planner, Mr. Daniel H. Burnham: "Make no little plans; they have no magic to stir men's blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we have gone will be a living thing, asserting itself with ever growing insistency. Remember that our sons and grandsons are going to do things that would stagger us. Let your watchword be order and your beacon beauty."

CHAPTER XI

TRANSPORTATION

Transportation facilities are the lifeblood of a community. If they are sluggish or scanty the industrial and commercial growth upon which the city depends for its very life cannot continue. Never was this brought home to Philadelphia more strongly than at the time the European War was forcing her into the position of second port and chief shipbuilding center of the United States. The throngs of new people drawn by the new industries taxed the street car lines to the utmost, the motor trucks crowded the streets, the railroads proved inadequate to handling the enormous amount of freight. So serious did the situation become here and elsewhere, that the United States Government had to step in to control the railroads and force improvements upon the street railways as a most important war measure.

Street Railways. 1. *History.*—All the street cars now bear the name of the same company, the Philadelphia Rapid Transit Company, and the cars are of the same style. In the old days the names of the companies painted on them were different for nearly every street. There were the Empire Street Railway Company, the Union Passenger Railway Company, the Continental, the Gray's Ferry, the West Philadelphia, and many others. Gradually all of these companies disappeared. A street railway line which was stronger or more enterprising than its neighbor would rent the other's tracks

for a long period, usually 999 years, and then run its cars over both systems. So far was this renting carried by 1889 that out of more than fifty companies which had received franchises, or permits to use the city streets, only fifteen were operating their own lines, and by 1893 the number was reduced to four. In 1901 the Philadelphia Rapid Transit Company was chartered and the next year it rented the only two lines which were left, the Union Traction Company and the Arch Street line, thus securing a monopoly of all the street railway business of the city.

The business methods by which this monopoly was built up were complicated and curious. When one company rented the lines of another it guaranteed to pay a certain dividend to the stockholders of the other company each year. In the formation of larger and larger combinations some lines have been rented as many as five times, and in each case dividends were guaranteed, so that the later companies have had very heavy expenses to meet. The present operating company must pay for the use of the tracks on Thirteenth and Fifteenth Streets more than seventy per cent annually on the money originally invested. For other streets it pays from sixteen to forty per cent annually. This financial situation is also the reason why it has been hard to secure low fares and free transfers in Philadelphia. Another curious thing about the business is that the franchises are perpetual. The state and the city have given the use of our streets forever, and there is no way for the city to get control of the lines without the consent of the stockholders under our present system of law. The later companies, such as the Union Traction and the

Rapid Transit Company, were formed merely for the purpose of renting other companies' lines. All of these things make it difficult for the community to understand the operations of the traction companies, and to secure from them better service and lower fares.

2. *Contract of 1907.*—If one goes over the files of newspapers away back to 1860 he will find hardly a year in which the papers were not complaining bitterly of the street car service. In 1907 the papers were saying more than usual about it, and the company replied that it was in such poor financial condition that it could not do any better. It proposed a sort of partnership with the city, and Councils agreed. The city promised not to let any other company build lines within its limits without first offering the opportunity to the Philadelphia Rapid Transit Company, and not to hold the company to any of the old requirements laid upon it by the City Councils, such as paving the street and removing the snow. In return the company promised to allow the city to have three representatives on its board of directors, and to pay a sum of money each year to the city. This contract holds good until 1957, when it is agreed that the city may buy the lines if it chooses to do so. The Director of the Department of City Transit, speaking for the city in 1913, said that this contract had been an advantage to the company rather than to the city in money matters. He said that the money paid each year was over \$800,000 less than the P. R. T. would have had to pay for paving and other charges under the old arrangement. The city, too, has been able to control affairs very little by its representatives on the board of directors.

3. *The Present System.*—Under the contract things

were as bad as ever, and the great strike of 1910 occurred. In 1911 one of Philadelphia's financiers was persuaded to undertake a reorganization of the business. He brought to Philadelphia a man who had had successful experience with street railways in other cities, and made him manager. Since then there has been continual improvement in all the affairs of the company: in the service, equipment, and payment of employees. Yet the company for the first time in its history has been able to pay dividends to its stockholders.

One can see from the map of the traction system what a network of tracks Philadelphia now has. There are two kinds of lines, the surface and the subway-elevated or high speed lines. On the surface lines the present type of car is the finest we have ever had. The "nearside car," by making it impossible for anyone to get on or off while the car is in motion, has greatly decreased the number of accidents to passengers. The subway-elevated system was started in 1901 and completed in 1907 for the Philadelphia Rapid Transit Company. It is now owned by the Union Traction Company and is rented to the Rapid Transit Company to operate. The line is elevated from Sixty-ninth and Market Streets to the Schuylkill River, a subway under Market Street to the Delaware River, and again becomes elevated along the river shore to the South Street ferry. Surface cars from West Philadelphia enter the subway at the Schuylkill River and proceed under Market Street to Thirteenth Street, where they turn and go back to West Philadelphia.

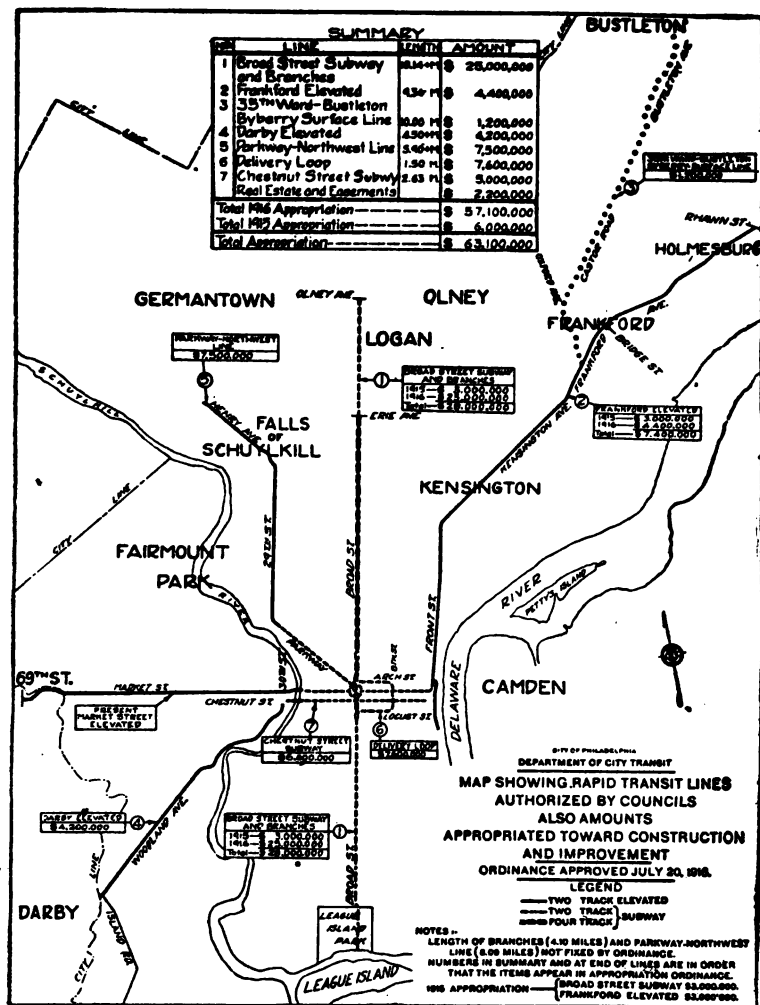
The subway-elevated has proved to be of the greatest benefit to the western part of the city. Up to 1894

one had to change cars and travel nearly an hour to reach Sixty-third Street from City Hall, while now the run can be made without change in twenty minutes. The effect upon the building up of that region has been almost magical. It is hard for us to realize that prior to 1907 the neighborhood of Sixtieth and Market, where now are banks and business blocks surrounded by many squares of modern residences, was like a country village with a few forlorn houses set in the midst of waste lots. The same was true of Fifty-second and Market Streets. If more such high speed lines were built still other backward districts would be opened for pleasant homes for those employed in the center of the city.

4. *Plans for New Lines.*—In 1912 the City Councils were persuaded to appropriate a sum of money to pay the expenses of an investigation into the needs for transit improvements. The report by the Commissioner employed to make the investigation recommended two new subways and three elevated roads. (See map of the transit plans.)

The plan is substantially the same now, though changed in minor details. The subway is to be built running under Broad Street from Olney Avenue on the north to League Island on the south. This will shorten the time to City Hall for residents of the northern part of the city by twenty to thirty minutes, depending on their location. It will at the same time aid in the development of both northern and southern sections which are not yet built up, and serve the great number of people employed at League Island Navy Yard.

The new subway, instead of joining the old subway at City Hall where they cross, will go under it and form



Courtesy of the Department of City Transit.

PHILADELPHIA TRANSIT PLANS

The new transit lines are established by ordinance according to this map. The original estimate of the cost will be much exceeded because of the general rise in prices.

a big circuit under Locust Street, Eighth Street, and Arch Street. Thus passengers for the center of the city will be able to leave the cars at various stations along those streets, instead of all leaving at City Hall, where the crowd is already great. (See map.)

One elevated road provided in the plan runs from the Delaware River end of the Market Street elevated north on Front Street, then on Kensington Avenue to Frankford Avenue, and then on Frankford Avenue to Rhawn Street in Frankford. This, every one knows, is very much needed. Kensington and Frankford are immense areas in the northeast, thickly populated and the home of many industries; yet they have been connected with the center of the city only by surface cars and by infrequent and expensive service on the railroads.

The next elevated road to be constructed will branch from the Market Street elevated at Thirtieth Street and go southwest to Darby. The region served by such a road is not so thickly populated as Frankford, but with such service it would be developed at once and furnish homes for thousands of families. Both of these elevated lines would be branches of the Market Street system and use the present subway to discharge their passengers in the center of the city until a Chestnut Street subway is built.

The city is also to build and own a double-track surface line to Bustleton and Byberry in the Thirty-fifth Ward. The transit company has not been willing to extend its lines in those directions because of the small population. It is to the interest of the city to see that what is now largely a farming region shall be made accessible, so that people may build homes there.

The lines mentioned above are to be completed as soon as possible. The elaborate studies of the location of the population of the city which were made showed that more high speed lines would be needed in the future. It seemed wise to plan for these in advance, so that they might fit in with the rest of the scheme. There was therefore placed upon the maps a subway under Chestnut Street, to be built within the next twenty years. This would be connected with both the new elevated lines, so that the Market Street subway would be relieved of the Frankford and Darby traffic.

The next line will be one to the northwest in the direction of Roxborough, called the "Parkway-Northwest Line." Beginning at the Broad Street subway near City Hall, it will run under the Parkway as far as the Green Street entrance to Fairmount Park. Then it will become an elevated line extending up Twenty-ninth Street and along Henry Avenue to Roxborough. The northwest section, which includes Manayunk and Roxborough, is as distant and as poorly served as Frankford, though not so populous, and it deserves an elevated line as soon as the city can afford it.

Instead of granting franchises to traction companies in the old fashion, it was decided that the city should build and own these lines itself. Power to do this was secured by acts of the State Legislature, and a Department of City Transit was organized to manage the enterprise. To secure the connection of all the lines the Rapid Transit Company has been offered the opportunity to rent them and operate them in connection with its system, sharing the profits with the city.

5. *Finding the Money.*—Though the construction of

these lines will cost a great many millions of dollars, it seems advisable to spend that amount, because it can be borrowed and afterward paid back from the city's share in the profits of the lines and the increased taxable value of real estate. At first the business will probably not be very profitable, but as the city grows it is bound to pay, and then the city's share in the profits can be used for interest on the loans and the gradual payment of the principal. Every improvement in transportation increases the amount of business done in the city, the number of people coming to live there, and consequently the price of real estate. Therefore if the value of real estate increases, the city's income grows larger. That high speed lines do increase the value of real estate is very easily proved by the experience of West Philadelphia. The increase in the assessed valuation of real estate in West Philadelphia from 1900 to 1906, while the Market Street elevated was being built, was over \$57,000,000, or fifty-eight per cent of its former valuation.

6. *Present Transit Situation.*—There have been many delays in putting into operation the plans which were first made in 1913. Much time was spent in persuading City Councils to approve the plans and pass the ordinances necessary. Then an election had to be held, at which the people signified their willingness to have the city borrow the money for the purpose. Acts of the Legislature and an amendment to the state constitution had to be secured as explained above. The Philadelphia Rapid Transit Company and the underlying companies, which are holders of the franchises, had to be persuaded to accept the plan for the leasing

of the city lines by the operating company. It was necessary to secure a "certificate of public convenience" from the state Public Service Commission, first for the building of the city-owned lines, and second for the lease of those lines to the Rapid Transit Company.

In spite of delays, something has been accomplished. A large portion of the elevated construction and some of the excavation has been completed. The approval of the Public Service Commission has been secured for the whole scheme of transit improvement. City Councils and the transit company have agreed upon a form of lease, and this is before the Public Service Commission for its approval.

The Philadelphia public should be very much concerned with the terms of the lease to the P. R. T. It will be an addition to the contract of 1907 and will bind the city for thirty-nine years to come. The terms of the contract of 1907 remain in force. The following are some of the important provisions of the new lease.

1. The company agrees to operate all lines built and to be built by the city with its own lines as a unified system.
2. The city is to provide the elevated and subway structures and the cars.
3. The company is to provide the electrical power and the equipment for its transmission; together with the station facilities.
4. The company agrees to extend its own lines, as extensions may be required by the city and approved by the Public Service Commission.
5. After all expenses and fixed charges have been deducted from the gross revenue of the unified system, the company and the city will each receive five per cent on its investment.
6. Within sixty days after the contract goes into effect exchange tickets are to be abolished and free transfers substituted, except in the delivery district, that is, the region bounded by Arch, Locust, and

the two rivers. After the opening of the Frankford elevated all exchange points will be free transfer points.

7. The fare is to be five cents unless the revenues prove insufficient to meet expenses and make payments to the city and the company equal to a return of five per cent on the company's capital stock and the city's investment. In the latter case it may be raised with the consent of the Public Service Commission. If the revenues prove to be more than enough to meet these payments, provision is made for lowering the fares with the consent of the Commission.
8. The accounts are to be audited each year by public accountants at the expense of the unified system.
9. The city has the right to buy out the company's interest in all the lines at cost, and operate them itself, at any time after July 1, 1927.
10. All the affairs of the unified system are to be under the direction of a Supervising Board consisting of the Director of the Department of City Transit, one member appointed by the company, and a third member, who shall be chairman, appointed by the Mayor and the president of the company. In case of failure by the board to agree on any point, the matter is to be settled by the Public Service Commission.

Rapid Transit to Camden.—There has been discussion for many years of plans for improving our connection with Camden. That city is the largest and nearest of the outside settlements which form a part of Metropolitan Philadelphia. Thousands of people cross the ferries every day because they work in our city or wish to take the trains for seashore resorts. Ferryboat service is very slow, especially in winter. At the time that the new transit plans were being formed, part of the scheme was to have a tunnel under the river to connect with the Market Street or Chestnut Street subways. The "Camden tube" had to be dropped from the plans because of the many difficulties in the way of its accomplishment. Some people favor the construction of a bridge rather than a tunnel because it would be cheaper.

For the carrying out of either plan the coöperation of the two cities must be secured and the permission of the two state governments.

Suburban Electric Systems.—Very important to Philadelphia is the service of the electric roads beyond our borders. They connect with the city system and make it possible for many people who work in the city to have pleasant homes in nearby towns and in the country. They serve to link up the parts of that greater Philadelphia which is in many ways a unit though not under the control of the city government. It is not desirable to describe these lines in a discussion limited to the boundaries of Philadelphia. Among the most important may be mentioned the Philadelphia and Western, a high speed road which leads to Allentown; the Trenton and Bristol Railway; the West Chester Line; the Chester Line; and the Old York Road Line, which carries so many Philadelphians to Willow Grove Park. The last two are under the control of the Philadelphia Rapid Transit Company. The outside electric roads are capable of much greater development, especially in the carrying of light freight and food supplies.

Motor Transportation.—Congestion of freight and express matter on the railroads has caused a rapid development of motor transportation. The United States Post Office Department and private corporations are starting motor truck lines to supplement the railroad transportation. Every day we can see in our streets great trucks bound from New York to Baltimore, or from Philadelphia to outlying towns, with a miscellaneous cargo of merchandise. This means of transportation promises to be a great advantage to the small shipper and consumer,

especially in the matter of food supplies, and will make more available to the people of Philadelphia the food grown in nearby regions of Pennsylvania and New Jersey. This new development brings new problems to Philadelphia. We must have broader streets, more durable forms of paving, and more regulation of street traffic.



(Courtesy of the Public Ledger)

A CONGESTED RAILROAD YARD

The new street plans for Philadelphia have been described in Chapter X.

Steam Railroads.—The chief means of transportation between Philadelphia and other cities is of course the steam railroads. They also serve another important purpose in providing con-

nections with the suburbs, where so many of the city's workers find homes. Three roads enter the city, the Pennsylvania, the Philadelphia and Reading, and the Baltimore and Ohio. All three have passenger terminals in the central part of the city, the Pennsylvania at Broad and Market Streets, the Reading at Twelfth and Market Streets, and the Baltimore and Ohio at Twenty-fourth and Chestnut Streets. The first two enter the terminals by an elevated roadway, the third

by a road along the banks of the Schuylkill. All have freight yards at the water front to transfer the goods brought from distant points to sea-going ships. The Reading freight terminal is at Port Richmond on the Delaware, in the northern part of the city. The Pennsylvania uses both the Greenwich Point terminal on the Delaware in the southern part of the city and that at Girard Point on the lower banks of the Schuylkill. The Baltimore and Ohio shares the last mentioned yard. At each of these terminals there are great docks, elevators, and machinery for handling freight. Spurs of the freight lines are also built into the manufacturing districts to serve the mills by delivering the raw materials and carrying away the products of manufacture. The Pennsylvania maintains a freight distributing yard in West Philadelphia and the Reading at Broad and Callowhill Streets.

One has to study a map of Philadelphia to realize how these railroads cross and recross the city. Because there was no attempt at city planning when they secured their right of way, there is much more space given up to tracks than is necessary. Each company has its independent lines, though they may be aiming at the same destination. Besides the loss of real estate values, there is a great evil in the crossing of the streets by railroad trains. Accidents to pedestrians and vehicles often happen at these crossings, and traffic on the streets is held up many times a day while it waits for the trains to pass.

The South Philadelphia Plans.—In the chapter on city planning reference has been made to the progress of the city in securing the removal of grade crossings.

The greatest enterprise of the kind which has been undertaken is in connection with the relocation of the railroads in South Philadelphia. It has been appreciated for many years that a great opportunity existed to improve conditions in that district, which had not yet been built up and so was open to rearrangement. In 1913 an agreement was reached between the city and the railroads. It will take many years to complete the changes.

Three lines at present cross the city from east to west in South Philadelphia. It is proposed to combine two of these lines into a new one. This will be an elevated running south on Twenty-ninth Street to Girard Point, then a surface line on the extreme southern shore, skirting the Navy Yard to Greenwich Point, where it will join with the Belt Line Railroad. The new road will be open to the use of any railroad entering Philadelphia. The advantages of this change will be evident. The area south of Oregon Avenue, which is much needed for residences but which has been kept vacant because of the presence of the railroads, will now be opened for development. The railroads will combine on one right of way, and follow the banks of the river where they can be of most service in carrying freight to the docks. The new road will all be elevated in the portion where it crosses streets, so that grade crossings will be removed. It is to be regretted that no way was found to remove the railroad on Washington Avenue. The agreement is, however, that the road shall be elevated so that grade crossings will be eliminated. The expense of these changes is to be divided between the city and the railway companies.

The Belt Line Railroad.—One of the crying needs in transportation has been a railroad line skirting all the

docks and open to all the railroads in common, so that a shipper sending a carload of goods to Philadelphia for shipment by sea might have them delivered to any steamship line he chose. As it was, he could send his goods only to the steamships using the docks of the railroad company over whose lines the car reached Philadelphia.

Some years ago the Philadelphia Belt Line was formed to meet this need. The community, represented by the Board of Trade and the Commercial Exchange, and the three railroads were to exercise joint control over it. Only a short line was laid, however, on Delaware Avenue from Vine to South Streets, and the development of the plan is left for the future. The new south shore line described above will help to realize the plan. Belt line facilities are guaranteed under the agreement to every wharf on the South Philadelphia water front.



(Courtesy of the Department of Wharves, Docks and Ferries)

BOAT OF COMMISSIONERS OF
NAVIGATION

Officers collect the papers showing port of departure, destination, cargo, etc., from all vessels going up the river.

The Docks.—As was pointed out in the chapter on city planning, Philadelphia has an unusually long water front, and all the Delaware and part of the Schuylkill banks are on deep enough water for sea-going vessels. About the year 1912 the city adopted plans for the improvement of this part of its resources. It was pointed out at that time that the available dock space was

monopolized by the railroads and by other corporations, and that much of it was undeveloped. It was very difficult for independent steamship lines to secure any wharf privileges. The great development of municipal docks which had been going on in other cities had been almost entirely neglected here.

When the agreement as to the relocation of railroads in South Philadelphia was reached, in 1913, the Pennsylv-



(Courtesy of the Department of Wharves, Docks and Ferries)
PROPOSED MOYAMENSING PIERS

vania and Baltimore and Ohio companies were persuaded to make an exchange with the city of water front property. The city secured the Greenwich Point property of the railroads as a location for municipal docks. The railroads in return were given title to the strip of land south between Greenwich Point and the Navy Yard. The land below Greenwich Point is to be occupied by new and extensive car storage and classification yards and new piers for the joint use of the two railroads.

The city committed itself at that time to a plan for two groups of municipal piers for commercial uses. The

first group, called the Southwark piers, consists of three at the foot of Queen and Christian Streets. They are of the most modern construction, with handsome concrete façades on Delaware Avenue. The second group of municipal piers is located partly on the land above Greenwich Point secured from the railroad company and partly on land north of that secured by purchase. They are called the Moyamensing piers. The group when finished will consist of ten piers, longer and larger than any others in the port of Philadelphia. These and the Southwark piers are equipped with railroad tracks and with modern devices for handling freight. The city has recently built smaller municipal docks for commercial uses at Dock Street and Cherry Street on the Delaware. It owned in 1918 sixteen piers, which were rented continuously. Yet there is a constant demand for more space. The building of the docks and their supervision is under the Department of Wharves, Docks and Ferries of the city government.

Rivers and Canals.—It has been sometimes imagined that because Philadelphia is more than eighty miles from the sea it cannot become a port of the first magnitude. Of the great ports of the world, London, Liverpool, Hamburg, and Antwerp are situated on rivers as is Philadelphia. Two of our rivals in America, Baltimore and New Orleans, are further from the sea than we are. Even New York is reached through twenty-five miles of channel. Provided that the river is ample in size, distance from the sea is an advantage because it gives safety in time of war and reduces the cost of transportation by bringing the ships nearer to the inland sources of their cargoes.

The entrance to the harbor of Philadelphia is by the broad and deep Delaware Bay and river. The channel is maintained at a depth of thirty feet by dredges of the United States Government, and within the city limits



(Courtesy of the Bureau of Surveys)

PLAN FOR THE RELOCATION OF RAILROADS IN SOUTH PHILADELPHIA.

by the city dredges. Work is now under way for increasing its depth to thirty-five feet. The channel is from 600 to 1000 feet wide and is navigable for large ships.

On arriving at the city, ships find more than fifteen miles of improved water front on both the Delaware and Schuylkill Rivers with nearly three hundred wharves for their accommodation. Most of these

wharves are connected with the railroad terminals, as we have seen.

Three canals give inland waterway connection to the port. On the south, at Delaware City, the Delaware and Chesapeake Canal leads to Baltimore. On the north, at Trenton, the Delaware and Raritan Canal gives a passage to New York harbor, while at Bristol the Lehigh



— ■ (Courtesy of the Department of Wharves, Docks and Ferries)
EXTERIOR OF MUNICIPAL PIER

Coal and Navigation Company has a canal connecting with the coal mining regions. These canals are navigable only for barges or small vessels. The first two have been included in the plan for the Intra-coastal Waterway between Maine and Florida and will probably be taken over by the federal government and made deep enough for large vessels.

The city controls the port through the Department of Wharves, Docks and Ferries. This department

regulates the construction of new piers and docks, and alterations of old ones, makes surveys and soundings of the water front, supervises the municipal piers, operates the city dredges, and maintains ice boats for breaking up any heavy ice which might impede travel on the

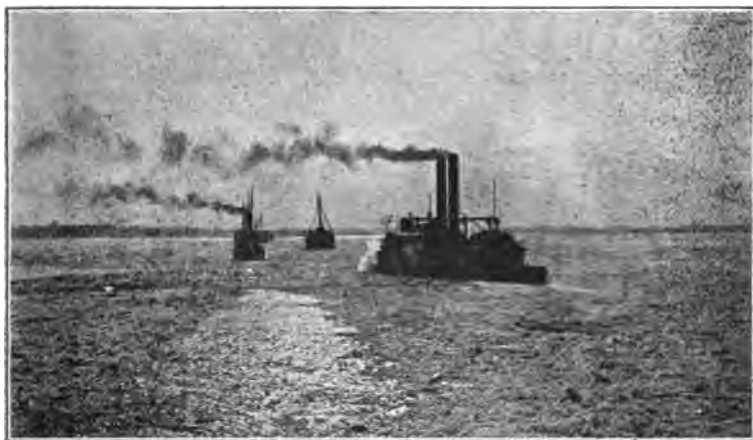


(Courtesy of the Department of Wharves, Docks and Ferries)

INTERIOR OF MUNICIPAL PIER

river. The water front outside of the city limits comes under state jurisdiction and is controlled by the Board of Commissioners of Navigation representing the city of Philadelphia, the city of Chester, and the borough of Bristol. This board has the same powers as the city department and in addition the examining, licensing, and control of the pilots who guide the vessels up the channel from Delaware Bay.

Conclusion.—It is hoped that the impetus given to Philadelphia by the war will lead the community of its own action to develop its enormous resources, and not let private enterprise reap all the advantage. It has started well by planning city-owned street railways and docks. The report of the Director of Wharves, Docks and Ferries in 1912 said: "That Philadelphia's natural



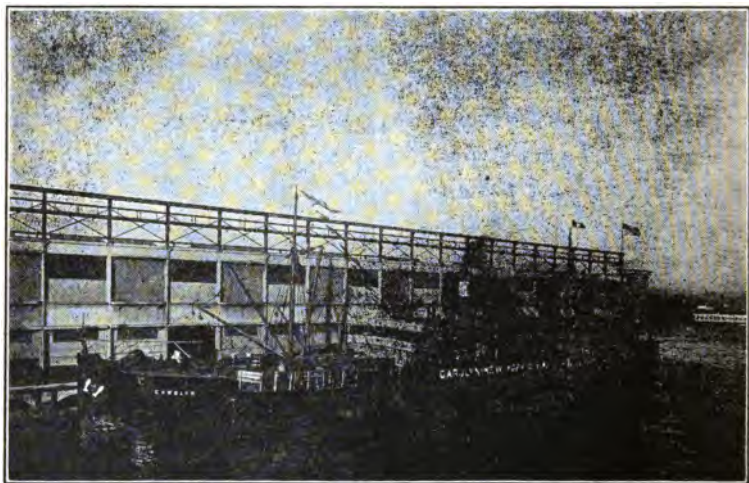
(Courtesy of the Department of Wharves, Docks and Ferries)

AN ICE BOAT

These boats break the ice for ships going up the river.

and artificial advantages are not only unexcelled, but unapproached, either by Boston or Baltimore, hardly admits of controversy. Located on an excellent deep-water channel, with a large producing and consuming territory tributary to it, with direct connections to three independent trunk line railroads, Philadelphia's facilities for securing and accommodating a large commerce are of the very first rank. New York offers some unquestionable advantages. As far as her facilities for economi-

cal handling of goods intended for transshipment into the Mississippi Valley and Western States is concerned, however, she cannot now compete with Philadelphia, except with the assistance of discriminatory freight rates. The time is ripe for Philadelphia to reassert itself and again take its place as one of the world's fore-



(Courtesy of the Department of Wharves, Docks and Ferries)

SHIP AT MUNICIPAL PIER

A new line of steamships secured for the city by the erection of the Municipal Piers.

most ports. That it cannot do so until its docking and railroad facilities are enormously increased needs no argument to any sensible mind. The city of Philadelphia is standing face to face with a great opportunity. If it advances to meet it with a rational program of accomplishment it can be grasped to the city's everlasting credit and profit." If this was true in 1912 it is even more applicable to the situation in 1918.

CHAPTER XII

GETTING A LIVING IN PHILADELPHIA

Business in Philadelphia.—Philadelphia has many claims for recognition as one of the greatest cities of the country. In population it ranks third; it is also third in the value of the products of its industries; again, it is third in the value of the goods imported and second in the value of the goods exported; it stands among the first five in the richness of its financial resources. To grasp some idea of the magnitude of the business life which involves so many people engaged in the manufacturing and distributing of such wealth, it is necessary to classify the business carried on in Philadelphia and notice each class briefly.

Industries.—Philadelphia owes its present industrial greatness to many factors. Our nearness to the sources of supply of coal and iron, the abundance of cheap labor available because of the great number of immigrants who came to our port, the various kinds of transportation that could be used—all combined to promote the growth of the manufacturing that began so early in Pennsylvania, and all served to induce other manufacturers to settle in our city. New industries are being continually attracted to Philadelphia for another reason too. Perhaps in no other single locality in the United States is there gathered together such a great body of skilled labor—mechanics, artisans, workers in all crafts. The skilled laborer is not usually a wanderer; he more

often owns his own home and is not easily drawn from it and his family, so the industry must come to him.

In approximately 9,000 manufacturing establishments in Philadelphia, over 250 varieties of industry are represented. The war has made many changes in the relative importance of our industries, but the following are among the most important in the value of output: ship-



(Courtesy of the Public Ledger)

A VIEW IN A MILL DISTRICT

building, clothing, textiles, iron and steel products, printing and publishing, sugar refining, leather (tanned, cured, and finished), petroleum refining.

There are some products of Philadelphia industries for which we are noted the world over. In the manufacture of

locomotives our city holds first rank. Philadelphia-made felt hats are worn by men in every country from Canada to Australia. The mechanics and workmen of every country use saws, files, and other tools made in Philadelphia. The street railway cars for most cities of the world are built here.

Other products also have helped by their quality or value to make Philadelphia famous, but the story of our industrial greatness cannot be discussed further in this chapter. The Philadelphia Chamber of Com-

merce is issuing a comprehensive series of pamphlets, each of which gives an account of the processes in one of the industries which helps to make the city one of the world's greatest workshops.

Commerce.—That Philadelphia should rank high in commerce is a natural outcome of its good location.



(Courtesy of the Department of Wharves, Docks and Ferries)

SHIPPING ALONG DELAWARE AVENUE

The raw material for many local industries, such as textiles and sugar refining, come by way of the port of Philadelphia, and there is a big business in the handling of other imports. In 1916 the value of all goods imported here was nearly \$100,000,000. In the value of exports Philadelphia ranks second only to New York, the goods exported in 1916 being valued at approximately \$200,000,000. A great deal of this trade is in the raw materials found near the city. From this port is sent coal from

the mines of Pennsylvania and West Virginia. Grain, lumber, and oil, both crude and refined, are shipped in large quantities. Exports of iron and steel from the sheet-metal mills of the state are heavy; and the commerce in the disposing of the products of our own factories is a vast business in itself. Besides these commercial lines which result from our industries and nearness to raw materials, Philadelphia has others which seem to be attracted here simply because of the volume of business. The wholesale paper trade is an example.

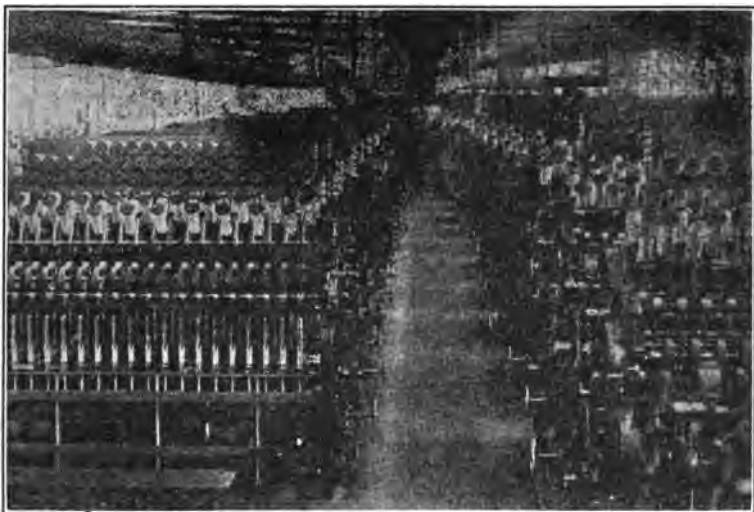
Because of our large population, our retail trade is enormous. In addition to the innumerable small retail stores, Philadelphia has five department stores which rank among the largest in the world.

The opportunity for securing our large population as a market, and the task of placing before a more distant public the products of Philadelphia manufacturers, account for the establishment in this city of the headquarters of the greatest firm of advertising agents in the country, while other advertising firms maintain offices here.

Finance.—An industrial and commercial life of such proportions requires adequate banking facilities. Philadelphia has played a leading part in the financial history of the country, from the time of Robert Morris in the Revolution, Stephen Girard in the War of 1812, and Jay Cooke in the Civil War, down to the floating of the last Liberty Loan. Some of our banking firms date far back into the last century, and have a world position. The banks and trust companies number over a hundred, and have a capital of \$200,000,000. For every day's business the transactions aggregate \$40,000,000—fully

\$1,000,000,000 per month. Because of the volume of financial operations in this city, Philadelphia was made the center of one of the Federal Reserve districts. Our Federal Reserve Bank is in the Hornor Building, on Chestnut Street above Ninth Street.

What Philadelphia Offers in Occupations.—Even this



(Courtesy of the Public Ledger)

A SPINNING ROOM IN A TEXTILE MILL

brief consideration of the wide range of business in Philadelphia would suggest the thousands of different jobs that are to be filled in order to get the work done and the products distributed.

Perhaps in no other city of the world, certainly in no other city in the United States, is there such a wide variety of choice of occupation as in Philadelphia.

1. Industrial Occupations.—Even in one factory there

are literally hundreds of different kinds of work, from the tasks that require only the commonest and most unskilled labor to the work that demands skill, training, and efficiency. In the highly specialized industries of to-day each worker performs but one process in the making of the product. For instance, in the shirt-making industry (included above under clothing) each process is performed by one person who does that one thing only, whether it is the guiding of an electric cutting machine or the tying up of the boxes in which the finished shirt is packed.

2. *Commercial Occupations.*—In this very factory, besides the industrial workers, you will note a number of people whose work is connected in some way or other with the buying and selling of the raw materials and the finished products that are turned out from them. The task of transporting the raw materials into the city, either by rail or by ship; of unloading and carrying to the place of business; of carrying the finished product from the factory to the wharf or freight yard from which the vessel or train bears it from the city, makes in itself a line of business which gives employment to many. The transportation of the population in street cars, trains, ferries, and automobiles is a slightly different commercial line offering employment. Much of the manufactured material made in our factories is sold right here in our own city, through the various wholesale and retail stores. The big department stores not only sell directly to the people of our city and those who come in from the outlying districts, but do an immense mail-order business. Many different kinds of occupations, with fine opportunities for advancement,

are open to those whose ability lies along commercial or business lines. The agencies concerned in the collection and distribution of food, furniture, clothing, books and papers, and luxuries employ thousands of workers in a large city like ours.

3. *The Professions.*—Many young men and women do not wish to enter either the industrial or the commercial world, but are attracted by the opportunities for further study and wider training and experience offered by the various professions. In this populous city there is a great field for the service of doctors, lawyers, ministers, teachers, and social service workers.

4. *Agricultural Occupations.*—Not many people realize that fully one-third of the land within our city limits is under cultivation, though everyone knows that the part of Pennsylvania within a fifty-mile radius of our city is one of the finest farming sections in the state. Here is an opportunity for those who do not like the confinement of factory or office, but would rather be out of doors. Dairying, truck farming, the raising of flowers or fruit, poultry raising, and gardening are possible occupations for those who are fond of country life.

5. *Other Occupations.*—Many occupations cannot be classified under any of the above headings, and yet they are all important for the prosperity, growth, and comfort of our city. Painters, bricklayers, carpenters, electricians, and many others have to learn their trades, and all look forward to the time when they will no longer be employees but employers.

Opportunities for Training for Occupations.—The sooner one can make up his mind what he wants to do for his life work, the better it will be for him, because

he can then decide just what lines to follow in the education that is necessary as a preparation for any vocation. In making a survey of the occupations it is apparent that the more highly paid men and women, the ones with the most responsible positions, were the ones with the greatest amount of education and special training.



(Courtesy of the Public Ledger)

MACHINE SHOP OF A SHIP-BUILDING PLANT

It may very well be that they did not get all that training while in school or college, but they have taken advantage of every opportunity to improve themselves in their special line of work. Boys and girls who leave school early may make what seems like a good wage to begin with, but they will soon find that the gates of progress are barred after they have gone a very limited distance. The United States Government, through its Bureau of Education, has made a survey

which proves that it is actually worth money to stay in school and secure the training which will make advancement possible.

1. *Public Schools*.—Philadelphia provides many opportunities for getting the necessary education in almost any line of work, even for those whose financial condition makes it difficult for them to stay long in school. In the first place, we have our wonderful public school system, already described in Chapter VIII, with its high schools, its evening schools in both elementary and high school grades, and its trade schools for boys and girls. In each of the higher schools the variety of courses offered gives opportunity for choice of subjects which will prepare for almost any vocation chosen.

2. *Colleges and Universities*.—For those who wish to go further in preparing for a vocation, the University of Pennsylvania offers training in medicine, dentistry, law, finance and commerce, and engineering. There are free scholarships to the University awarded on competitive examinations to pupils of the city high schools. Temple University offers most of the vocational courses given by the University of Pennsylvania. The Drexel Institute offers instruction in engineering for men, and in domestic science for women, and gives secretarial training for both sexes. Those planning to teach or do social work may get preparation in the general courses in the beautiful suburban colleges at Haverford, Bryn Mawr, and Swarthmore, or at the city universities.

3. *Technical Schools*.—In such a great textile center as our city, where tens of thousands of men and women are employed in the mills, there is great need for just such an institution as the Philadelphia Textile School,

where the students learn how to be practical manufacturers with a knowledge of textile machinery, spinning, weaving, dyeing, and finishing. This school is only a part of the greater institution, the Pennsylvania School of Industrial Art, which is located at Broad and Pine Streets. Other important institutions are the Franklin Institute and the Spring Garden Institute, while in every part of the city there are branches of the Young Men's Christian Association and the Young Women's Christian Association.

There are in our city, or near it, literally hundreds of other schools, where one can learn to do almost anything—from typewriting and stenography to hairdressing, manicuring, and massaging. So the boys and girls who have decided their life work have a wide choice open before them in choosing the place where they will get their training for it. This very fact makes it all the more imperative that they should try in every way possible to make that choice wisely. Schools and colleges will furnish their catalogues on request, and teachers or friends may be asked to help in the choice.

4. *Government Aid.*—The state government, through the Department of Public Instruction, enforces the state School Code, and endeavors to bring our schools and colleges up to a higher standard of excellence. Recently the feeling has been growing everywhere that more attention should be given to vocational and industrial education, and our state Department of Public Instruction has established two bureaus to promote that training in Pennsylvania. Our national government is now working in coöperation with the states in the promotion of vocational education. Just a few

months before the war broke out the Smith-Hughes Act was signed by the President, and a federal Board for Vocational Education has already been appointed. The act provides that federal grants of money will be used to help the states to pay the salaries of teachers of trades, home and agricultural subjects. The war has shown the general shortage of trained workers, and has



(Courtesy of the Public Ledger)

LEAGUE ISLAND NAVY YARD

Showing a battleship in dry dock. The yard gives employment to thousands.

led many of the states to begin at once to make use of this federal aid.

Private Organizations Which Aid in Getting a Living.—The young people who receive their training in the city of Philadelphia find when they get into the business life of the city that they have many interests in common with the other men and women who are doing the same kind of work. These common interests often draw them together into societies or associations for their mutual benefit.

1. *For the Laborer.*—The skilled laborers in the great industries of the city are well organized into unions, according to the special work done in the industries. The unions are interested in the hours of labor, the conditions under which the work is done, and the wages paid. By speaking for the men as a whole, better terms are made with the employers than each individual could make for himself. Sick benefits and unemployment allowances are other advantages enjoyed by members of unions. The unskilled laborers are not banded together to further their interests, unless they belong to some such general labor association as the Industrial Workers of the World, which is not a factor to be reckoned with in Philadelphia. The workers of the city as a whole are represented by the Central Labor Union. The local unions are frequently branches of national organizations concerned with the workers in a particular trade. The majority of these national unions and the smaller unions are affiliated with the American Federation of Labor, which is interested in general labor problems and represents the workers of the nation as a whole.

2. *For the Business Man.*—In the same way the managers of business concerns, the manufacturers, and the bankers are drawn by their common interest in improving the business facilities of the city into forming organizations for more effective action. The Board of Trade is one of the oldest of these. Its members are interested particularly in the port facilities, although its activities extend in all directions. The Chamber of Commerce, to use its own words, "was organized for the purpose of improving the commercial, manufacturing, shipping, and financial interests of the port and city;

to initiate, advocate, and encourage whatever may increase the prosperity and welfare of all the citizens of Philadelphia and vicinity." Its membership registers over 5,000 manufacturers, merchants, bankers, and other business men, "organized for the purpose of acting coöperatively for the commercial advancement of Philadelphia." In the Manufacturers' Club the social aspect is important, as well as the business of looking after the manufacturer's interests in legislation.

These organizations are interested in the business problems of the city as a whole. There are also local organizations, such as the Walnut Street Business Men's Association and the Germantown and Chestnut Hill Improvement Association, each of which is especially interested in the problems of its particular district, and in calling the attention of the city authorities to its needs. As an illustration of the interests of these organizations, one of these states in its bulletin that it stands for "well-planned, clean streets, for the proper disposition of rubbish and garbage, for the removal of grade crossings, for adequate recreation facilities, for proper education of the young, and for a police protection which will make our district a safe and agreeable place in which to live."

The business life of a great community would not be complete without a Stock Exchange—a place where the stocks and bonds of corporations can be bought and sold. The Philadelphia Stock Exchange, at Broad and Walnut Streets, performs two services for the community. It helps to protect the investor, because of the publicity which it gives to the market prices of securities. It also serves a business function, as there must be a

market for the securities of great transportation and industrial concerns in order that such concerns may come into existence and continue to grow. In Philadelphia the market for meat and grain brokers is the Bourse. Of course there is no produce to be seen in the Bourse, for the brokers buy and sell for others, not for themselves, and simply make the business arrangements in the great hall called the Bourse. One of the important exchanges in this hall is the Maritime Exchange. Through this exchange members can in time of peace find out the exact location of any ship in almost any place. If the ship is damaged on a voyage, for instance, the owner can get everything ready so that it is repaired immediately on reaching port.

Another organization which aims to help the Philadelphia business man, especially the manufacturer who wishes to develop his export trade, is the Commercial Museum. Most people know of the buildings of that name at Thirty-fourth and Spruce Streets, where exhibits are held and free lectures on geographical subjects are given on Saturday afternoons in the winter. This is only one side of the work of the organization. Its Foreign Trade Bureau and its Commercial Library collect and dispense all the information procured by the work of the Department of Commerce in Washington and by organizations interested in trade the world over. It keeps lists of firms in other countries, with facts and figures showing what they specialize in, how reliable they are; in short, everything that a business man in Philadelphia would like to know. Its translation department, for a reasonable sum, will help with the merchant's foreign correspondence. It publishes in

both English and Spanish a paper called *Commercial America*, and circulates this abroad to attract the attention of foreign merchants to the advantages of the United States as a country in which to purchase goods.

3. *For the General Public.*—Although the employees and employers have their separate organizations for furthering their particular interests, there are other private enterprises which have been undertaken with a view of supplying the needs of the community as a whole. One of these is our banking system. This makes it possible to transfer large sums of money from one person in our city to another person far away, merely by mailing a piece of paper. A man whose credit is good and who offers acceptable securities can, if an emergency calls for it, borrow money from his bank at a reasonable rate of interest. The banks not only keep our money safer than we can at home, but also pay us interest for that privilege. The banks of the city maintain a "clearing house" for their mutual convenience, assistance, and protection. Here all the checks and drafts received in the city banks are balanced, doing away with the innumerable transactions between individual banks which would otherwise be necessary. The building and loan associations which are so justly popular as an agency of investment are all private undertakings. So, too, are the companies organized to give various kinds of insurance. Many important insurance companies have their homes in Philadelphia.

Governmental Agencies Which Aid in Getting a Living.—The community is so interested in seeing to it that private enterprises are conducted for the benefit

of the community as a whole, that government regulation and supervision is provided in many cases.

1. *The Government and Industry.*—Especially is this true of the industries, for if the workers were not safeguarded by governmental provisions the conditions of work might be such as to cause undue illness or unemployment and thus react on the welfare of the community. The city has not the power to make provisions regulating labor conditions. This function belongs to the state, but the city joins with the state in enforcing the laws. The Child Labor Act of 1915 forbids the employment of children under fourteen, and the working of children under sixteen for more than nine hours a day or fifty-one hours a week, including eight school hours. This is the law which provides for continuation schools, so that minors receive some schooling up to the age of sixteen. It regulates even up to the age of eighteen the kind of work which boys and girls may do. Such dangerous occupations as the manufacturing of paints, tobacco, and alcohol are prohibited for minors under sixteen.

Another law requires that boys under sixteen and all female workers be given not less than forty-five minutes for the midday meal, except when the hours of labor per day are short. Nor was it considered advisable that women should have too long a working day or work too many hours in the week; so to prevent this an act was passed in 1913 which forbids the employment of women for more than six days or fifty-four hours in any one week, and prohibits their employment for more than ten hours in any one day. Night work is prohibited for women in manufacturing establish-

ments, and for all boys under sixteen and all girls under eighteen.

Of course, we should expect to find the laws for children and women more strict than those for men, but the state is nevertheless concerned that the ability of the men wage-earners to support themselves and their families should not be impaired. For this reason there are laws regulating the crowding of machinery in working rooms which might cause risk of injury to the employees, providing for adequate (250 cubic feet) air space for each person, and requiring the use of protective devices on dangerous machinery. Even these laws have been found insufficient, as employers often preferred paying fines for violating the laws to going to the expense sometimes entailed in complying with them.

For the further protection of the worker, the Workmen's Compensation Act was passed in 1915. In case an employee is injured the employer pays certain medical and hospital expenses, and pays to the worker (or to his family, in case death results) an amount of money based on the wages the employee received and on the seriousness of the injury. This is not compulsory but optional; neither employees nor employers are forced to comply with it. But it has been found to the employers' interest to do so, as certain legal advantages which employers formerly had in lawsuits were removed by this same law, so that if the case did not come voluntarily through the compensation provisions but went into the law courts the workmen had every advantage. A special board—the Workmen's Compensation Board—administers the cases which come up under this act. This board comes under the state Department of Labor and Industry.

Besides the laws we have mentioned, there are still others, such as the Fire Drill Act, providing for monthly fire drills in factories where women are employed, the Lead Poisoning Act, requiring "sanitary precautions and appliances" in certain establishments—all for the purpose of preventing people from working under conditions which might endanger their lives or lessen their ability to take care of themselves.

Various bureaus of the state Department of Labor and Industry have charge of enforcing these laws throughout the state, but in Philadelphia some of the city officials cooperate. The Bureau of Compulsory Education, for instance, enforces the Child Labor Act, and it is the duty of the Department of Public Safety to enforce the Fire Drill Act.

The state Department of Labor and Industry has, in accordance with the law passed June 4, 1915, undertaken another activity designed to help people to be self-supporting. It has established an employment bureau, with its central office at Harrisburg. The main purpose of this act is to reduce unemployment, to help the man or woman out of work to get a position; because every day that a man is out of a job costs him his daily wage and costs the community the value of his labor. Employers seeking employees and persons seeking employment are brought into communication with each other, so that both are benefited. The people in charge of these offices are also supposed to study the problem of unemployment and try to think out means of preventing it. The Philadelphia branch office on Arch Street, in the one month of July, 1916, received requests from employers for 591 workers. They had

787 applications and referred 551 persons to positions. Of this number, 507 received the positions to which they had been referred. There is also a branch office in Kensington. The state operates this bureau without charge to employer or employee, and pays the cost out of the taxes collected from the people at large because it is the general public that in the end derives most benefit from the work of the bureau.

2. *The Government and Commerce.*—Transportation of raw materials, of finished products, of people to and from their places of work, plays such an important part in the business life of the city that here again the organized will of the community finds expression in government regulation and aid. The part played by the Department of City Transit in securing rapid and safe street car transportation is discussed elsewhere. The state Public Service Commission also concerns itself with the transportation question within the city. Since the railroads coming into Philadelphia do an interstate business, the decisions of the federal Interstate Commerce Commission regulate the rates charged, both freight and passenger, and the accommodations offered.

In view of the size of our export and import trade, the use made of the port facilities concerns not only the city but the state and the nation. Then, too, the geographic position of Philadelphia is such that the development of the port cannot be the business of our city alone, nor even of the state of Pennsylvania. The work of the city Department of Wharves, Docks, and Ferries in supervising the water front, of the state Commissioners of Navigation in regulating river traffic, and of the Army Engineers of the federal government in

maintaining and deepening the channel has already been discussed in a previous chapter.

That our export trade is a matter of interest to the national government is shown by the work of the Bureau of Foreign and Domestic Commerce. This bureau stands ready to furnish anyone who asks it information regarding climate, products, transportation, tariff rates, language, customs of dress, and food in foreign lands. These have been carefully collected in reports by American consuls and supplemented by the work of special agents. Moreover, they are all classified, and usually written up and printed in convenient form. Every day this bureau issues *Commerce Reports*, a newspaper containing important information collected by all the bureaus of the department. Anyone can get this at a very low cost. One manufacturer, however active and diligent, could not unaided collect for himself all the important facts, for instance, about the use of sewing machines in Chile. The furnishing of such aid in making business successful is the reason for the existence of this bureau of the federal Department of Commerce.

In another way the federal government affects the business life of Philadelphia. Every time a new law dealing with the tariff (duty levied on imported goods) comes up in Congress all the business men are greatly concerned. Most of the great industries of our city, especially the textile industry, have been protected by the very high tariff from the competition of foreign industries. The tariff law now in operation is the Underwood Tariff of 1913, and in it the rates generally are lower than they have been since before the Civil War.

3. *The Government and Finance.*—As was the case

in connection with industries, the city government does not have the power of making laws to regulate financial transactions. The state of Pennsylvania, however, has helped our banking system to attain its present height of efficiency by making and enforcing through its Banking Commissioner laws to prevent speculation



(Courtesy of the Public Ledger)

INTERIOR OF A TEXTILE MILL

with bank funds, or other unsound practices. State laws also regulate the handling of money by the building and loan associations, so that people who invest their savings in the stock of these organizations run slight risk of being defrauded. The insurance companies come under the supervision of the Insurance Commissioner. Another government agency to prevent fraud is the Patent Office at Washington, a bureau of the Depart-

ment of the Interior. By applying for a patent here an inventor is assured of the exclusive right to make and sell his invention for the term of seventeen years.

Business conditions in Philadelphia are often affected by the financial state of the country as a whole. In order to lessen the danger of panics President Wilson succeeded in getting Congress to pass, in December, 1913, the Federal Reserve Act. This divided the United States into twelve districts in each of which is located a Federal Reserve Bank. As has been said, Philadelphia is the center of one of these districts. These banks do not receive deposits from nor make loans to individuals. They are, as the name indicates, reserve banks in which each of the banks of the district deposits a certain percentage of its reserve. The national banks, getting their charter from the federal government, must join the system; the state banks are urged to join. This system is designed to assist the banks over times of financial stringency; for when a member bank desires to issue notes it can sell to its reserve bank "commercial paper"—that is, the notes of individuals it may be holding—and receive "reserve notes" to circulate as money. Thus an emergency currency is quickly available. This system has proved its value to the business men of the country many times since the great war began in 1914.

Conclusion.—These various agencies, private and public, may not seem to affect directly all the two million citizens of Philadelphia. In the long run, however, each individual is affected by what concerns the larger community—the city, the state, or the nation. And while men may band themselves together to further

the interests of one section of the city or of one class of the people in the city, the interests of the small group ultimately are those of the large community. The task of the government is to supplement the work done by the private agencies in promoting the business life of the city, and to direct their activities into lines helpful to the whole. As the chief interest of most people is in getting a living, so the community takes a vital interest in the opportunities given the individual. It shows this interest early in the life of each person, in providing for his education and compelling him, for his own good, to spend a fixed number of years in school. In this school the varied courses begin an actual preparation for getting a living. Later, in industry, the interest of the community is expressed in the laws aiming to help the individual to remain self-supporting, and in agencies to widen the opportunities afforded by the city. In all these ways the community is acting in its own interest, too, for of course from the person prepared for earning his living and assisted in that task the community expects a return of increased efficiency and loyalty.

CHAPTER XIII

CHARITIES

Just as city conditions make the problem of preserving health more difficult, so also they make it harder to be sure that every person in distress finds a good neighbor when he needs one. In trying to supply all the forms of neighborliness that may be required in a city, a very elaborate and complicated system has grown up. The more modern term "social service" better expresses what the various institutions and societies are trying to accomplish, if with the older term "charity" is associated only the giving of alms.

Coöperation of Public and Private Agencies.—Let us see first what the city in its public capacity does for its poor. If some neighbor should tell a policeman that a poor widow was very ill and her children needed care in a certain house, what would he do? After making sure the story was true, he would send for the ambulance of the Philadelphia General Hospital at Thirty-fourth and Pine Streets, where they would all be taken. The woman would be first admitted to the receiving ward. If she was well enough she would be questioned by a member of the Social Service Department as to the history of her case, thus helping her doctor and assisting in determining the best care for the children. Then after examination she would be placed in the proper ward.

If one of the children was found to be feeble-minded, he would be brought before the Municipal Court and

committed to the care of the Children's Department, thus becoming a ward of the city. He would then probably be boarded out in a supervised home, and later, if room could be found for him, sent to the State Institution for the Feeble Minded at Spring City, when he would become a ward of the state. The other child, being mentally normal, would be boarded out temporarily in one of the private agencies or homes for the care of dependent children. This agency might be the Children's Bureau, 419 South Fifteenth Street, where he would be kept at the shelter which it supervises until the outcome of the mother's sickness was determined. Here he would be given a thorough physical examination and receive any needed treatment. If the mother should die, the child would become a permanent ward of the Department of Health and Charities, and would continue to be boarded out, perhaps through the Children's Aid Society. Meanwhile the record of this family would be looked up in the Registration Bureau, 425 South Fifteenth Street, and if at an earlier date some society had helped them, that society would be informed and its coöperation secured. In any event, the fact of the present work being done would be recorded for future reference, thus helping to make a sensible, continuous effort out of what might have been disjointed, inefficient work by a variety of "neighbors," neither of whom knew the other. This bureau, where most of the Philadelphia charitable agencies register their cases, affords an excellent example of a city need which would not arise in a rural community.

In the story of this family one fact is evident—the coöperation between public and private agencies. This

is especially true in the care of children. The city very properly does not allow children to be kept in its institutions for adults. When they are received at the Children's Department at Thirty-fourth and Pine Streets they are examined by a physician, and if ill they are sent to the children's hospital, which is outside the grounds; or, if ready for placing, they are distributed among various agencies—the Children's Aid, Catholic and Jewish institutions, Home Missionary Society, etc.

Feeble-Minded Children.—A distinct problem is presented by the feeble-minded children, who constitute about one-fourth the number handled by this department. It is the accepted theory that the state should care for all the feeble-minded. They need care by specially trained attendants and teachers. A variety of indoor and outdoor occupations should be provided that will make all the higher grade feeble-minded self-supporting. This can best be done on a large scale in a sort of village or colony. Pennsylvania now maintains two institutions, one for the western part of the state at Polk, and one for the eastern part at Spring City. There is also under construction a state home for feeble-minded women. The present state provision is entirely inadequate, but the city, hoping for a better day to arrive, has not built an institution of its own for the care of these unfortunates. Nearly three hundred Philadelphia children are placed at Spring City. At Elwyn there is a private institution receiving state aid which cares for over three hundred more, and fifty are being boarded in supervised private homes. But this provision is by no means adequate, and feeble-minded adults are to be found in the city homes for indigent

men and women and in the insane hospitals. It is only since 1913 that the court could commit for feeble-mindedness just as it does for insanity, that is, put the feeble-minded person under the guardianship of the city or state. The community now is beginning to awaken to the seriousness of feeble-mindedness; to realize that it descends from parent to child; and to



(Courtesy of the Bureau of Charities)

WOMAN'S DEPARTMENT, SPRING HILL

believe that feeble-minded persons should not marry, but should in most instances be cared for throughout life in farm colonies or in other institutions.

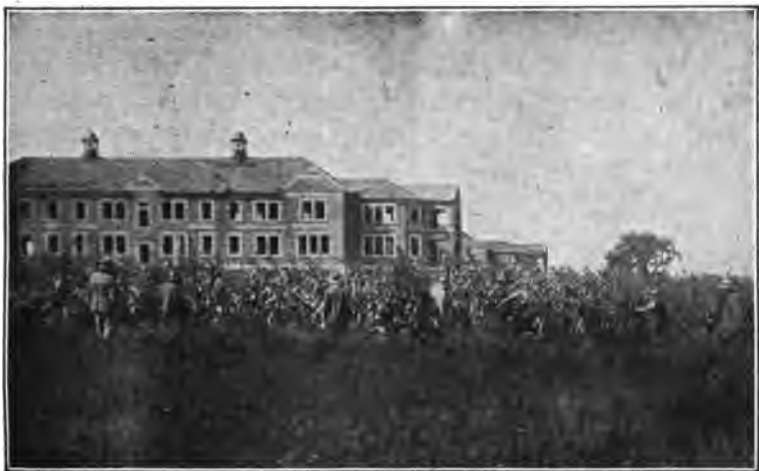
Homeless Men and Women.—Now let us suppose it is a man who is found sick and homeless in Philadelphia. He is received, like the woman already described, at the General Hospital and treated until well enough to leave the sick wards. If he can go to work right away he may be helped by the Social Service Department

to get a job, through the state Bureau of Employment at 1519 Arch Street. If he needs convalescent care he will be sent to the "Men's Outward" at Holmesburg. Here in a home overlooking the Delaware, large enough to accommodate 1,500 men, he may stay permanently if he does not become able to support himself. There is a large, finely equipped bakery at this home where, with the help of the inmates, all the bread used in the institutions of the Department of Charities is baked. This home is designed primarily as a home for the indigent and has no special fitness for a convalescent home. Several private institutions offer free convalescent care to women, but there is a lack in Philadelphia charities, both public and private, in the care of convalescent men.

The indigent women are housed partly in one building of the Commercial Museum at Thirty-fourth and Pine Streets, and partly at what was once a fine country residence at Spring Hill Farm, generally known as Brown's Farm, not far from the men's home. As soon as the city appropriates enough money to build more houses at the new location, all the indigent women will be transferred to it. Occupation is found in sewing for those who are able to work, making articles needed in the institutions. The home at Spring Hill Farm is very attractive with its sun-parlor overlooking the river, its vegetable gardens, cared for by some of the indigent men from Holmesburg, and its generally home-like air.

It is only since 1910 that Philadelphia has begun to move its charitable institutions to the northeastern outskirts of the city. Before that they were all at Thirty-fourth and Pine Streets—so-called Blockley, from the name of the township when the almshouse was

located there in 1834. The increase in the city's population caused very serious overcrowding before the present transfer began. The old idea of an almshouse, one which still exists in some country communities, is a place where all kinds of poor people are taken—men, women, and children, sick and well, sane, insane, epileptic, and feeble-minded. That is what the Philadelphia



FARM WORK AT BYBERRY

Out-of-door work is one of the best means of restoring mental health

almshouse was at the beginning of this century. Of course there was an attempt to classify the different kinds, but when you crowd over five thousand people into five acres of ground you cannot keep them well separated or make them very comfortable. The noisy insane patients are likely to disturb others, children catch each other's infectious diseases, and feeble-minded and mildly insane people who could be happy out of doors at work are housed up in dull idleness.

The Insane.—Although modern practice favors state care of the insane, for the same reason as of the feeble-minded, Pennsylvania has not yet adopted it in a thoroughgoing fashion. So Philadelphia has had to build its own asylum at Byberry, also in the northern part of the city. This is not entirely completed, but some buildings are already in use and over eight hundred men and women have been transferred there. Here a model farm gives outdoor occupation to the mildly insane men and often helps to restore them to health. The handwork for insane women is planned with special reference to their reëducation and contributes greatly toward their improvement.

Philadelphia General Hospital.—The part of the institution at Thirty-fourth and Pine Streets which will doubtless remain there for many years to come is the Philadelphia General Hospital, a huge institution caring for over two thousand patients and all types of disease. A generous appropriation by the city in 1915 made it possible to install many needed improvements: a new nurses' home, a finely equipped pathological laboratory, a power house outside the grounds, a modern diet kitchen, and, what was equally important, gallons and gallons of fresh paint. Not all of these improvements are completed, but all are under way.

The hospital is built around four sides of a hollow square—a huge white building, inside heavy white-washed walls, the whole enclosure covering five acres. It can be approached only from the east, that is, from Thirty-fourth Street, and very much needs access from the west. A bridge across the Schuylkill is also needed to bring South Philadelphia nearer. The location is a quiet

one, its nearest neighbors being Woodlands Cemetery, the University of Pennsylvania, and the Commercial Museum, while its nearness to the river helps to supply good air.

Bureau of Charities.—The Bureau of Charities is a part of the Department of Health and Charities, which is under a director appointed by the Mayor, and the



PATIENTS CARING FOR CATTLE AT BYBERRY

bureau itself is headed by a superintendent. The General Hospital and Insane Hospital each has its chief resident physician. The children's agent is also head of the Social Service Department, and with too small a staff accomplishes a wonderful amount of work in both fields.

In the Children's Department over eight hundred children are brought to the city's care in a year. The Social Service Department is like that of most modern hospitals. It consists of a staff of workers who find out about the

home conditions of needy patients, and try to see to it that when they are discharged they do not go back to the same hard conditions that helped to bring them to the hospital. Insane patients that recover are paroled, that is, discharged under supervision, and the Social Service Department watches over them.

All that has been said as to Philadelphia public charity refers only to a portion of the city. Germantown, Bristol, Roxborough, Oxford and Lower Dublin, Somerton and Byberry, when they came into the city in 1854, all retained the right to manage their own charities and to be exempt from a corresponding portion of the city tax.

Mothers' Assistance Fund.—Another rather recent form of public aid to be established in Philadelphia is the Mothers' Assistance Fund. Before various private societies, and later the state, began helping mothers in their own homes, it used to be the custom to let such a family be broken up. That is, the mother would have to place her children in homes of some sort while she went to work to support herself, perhaps paying a little towards their board. Then people began to see that since the children must be cared for it would be much better to let the mother, if she is a good one, train her children herself.

So in 1913 the State Legislature passed an act creating such a fund for widowed mothers with two or more dependent children, half the amount to be contributed by the state and half by the counties of Pennsylvania which availed themselves of it. It is administered under the Department of Education, putting the emphasis on the fact that the mother is being helped to educate her children. At the Philadelphia office, 1414 South

Penn Square, there are a chief agent and four assistants who investigate cases and keep track of them, collecting the school reports of the children and advising as to living conditions and care of their health, until the arrival of the children at working age takes the family off the assisted list. At present they are administering an inadequate fund of some \$60,000 a year, assisting about two hundred families, with a thousand more on the waiting list.

Private Associated Charities.—In addition to these public means of expressing the neighbor spirit, Philadelphia, like all other great cities, has a vast number of private agencies that are trying in one way or another to help those who need it—children, old people, the crippled, and the handicapped of all sorts. The societies of a more general scope, and those which endeavor to centralize the other individual agencies, are located in the Charities Building, a rather hopeful name for a row of old residences on Fifteenth Street below Pine Street. These buildings have been altered to fit as well as possible the needs of half a dozen societies. The societies located here are the Children's Bureau, the Registration Bureau, the Children's Aid Society, the Society to Protect Children from Cruelty, the Seybert Institution, and the Society for Organizing Charity. Some time, it is to be hoped, Philadelphia will have a modern Charities Building in which her citizens can take pride; for the bringing together in one place of societies which work in conjunction is a great saving of time and effort.

Dependent and Delinquent Children.—There are more than seventy-five institutions and agencies in and near

Philadelphia caring for dependent and delinquent children. From Girard College, "probably the wealthiest orphanage in the world," down to the private boarding homes, the problem of supervision and coöperation exists. To meet this want the Children's Bureau was organized in 1907. It endeavors to prevent duplication of work among the various agencies and to bring



FEEDING CHICKENS AT BYBERRY

about greater efficiency through round-table conferences, the publication of a periodical called *Coöperation*, and other means. The bureau at present reports an oversupply in Philadelphia of agencies admitting young children, who are often better cared for in supervised private homes, and a lack of those admitting boys and girls of ten years and over—an age at which institutional care, with industrial training and vocational guidance, often works best. A shelter is maintained where children

are kept during the investigation of their cases. It is very important that children, before being placed in institutions, should have a thorough medical examination and not be placed with other children if they have communicable diseases. This work has been so thoroughgoing that "in no other city of the United States has the medical care of dependent children been so carefully developed as in Philadelphia."

The Children's Aid Society of Pennsylvania is the chief child-placing agency, having on its list at present over eighteen hundred children from Philadelphia alone. When the Children's Bureau decides that a child needs placing out and is physically fit for it, the Children's Aid Society finds it a home—a temporary one if the child's own home is likely to be restored, or a permanent one if that is needed. This will most likely be a boarding home, although a few children are legally adopted each year. The boarding homes are visited frequently until the boy or girl comes of age, while teachers and pastors make direct reports about the children to the society.

The Pennsylvania Society to Protect Children from Cruelty has its field of work indicated by its name. It is confining itself more and more to its own specialized work, leaving the child-placing, if that becomes necessary, to the agencies that exist for that purpose. Its office is open day and night, and its aid can always be secured for the protection of a child from cruelty or neglect.

When the problem is not the child but the family as a whole, the chief agency for constructive work often combining that of many different agencies is the Society for Organizing Charity. With its central office and its

thirteen branches, it undertakes to help people in their own homes, and over seven thousand families come under its care in a year. In each district there is a trained worker for superintendent, and a Friendly Visitor's Conference—a committee of volunteers who assist her. In many families who are assisted the money need is small. Sometimes no financial help at all is needed.



(Courtesy of the Bureau of Charities)

KITCHEN AT BYBERRY

What is wanted is an organized, intelligent neighbor spirit to give advice and sympathy, and to help the family untangle problems of management that it never could have solved alone. The national and even international character of organized charity makes it possible for this society to reunite many families whose members have become widely separated.

Jewish Charities.—Besides the center at the Charities Building at Fifteenth and Pine Streets, there are two

other centers for charitable work, the Federation of Jewish Charities and the Catholic Children's Bureau. The headquarters of the Federation of Jewish Charities is at the Empire Building at Thirteenth and Walnut Streets. This is a financing society, somewhat on the plan of the "war chest," which undertakes the support of thirteen related societies. These societies unite not only in their financial appeal but in their annual meeting and annual report, and work in close conjunction. Of these societies, the United Hebrew Charities corresponds rather closely to the Society for Organizing Charity, the Juvenile Aid to the Children's Aid, and the Bureau for Jewish Children to the Children's Bureau already described.

Catholic Charities.—The Catholic Children's Bureau at 1700 Summer Street is a diocesan institution, and is under the charge of the Director of Diocesan Missions. All the child-caring agencies of the diocese are supervised from this office and a shelter is maintained for temporary care. The bureau does not itself give home relief, but when home relief is needed it works through a central children's bureau conference of the St. Vincent de Paul Society. This is an international men's society, organized in each parish, which does volunteer visiting and almsgiving in the homes where help is needed, as well as in prisons, almshouses, and hospitals.

Financing and Standardizing of Charitable Work.—When the financing of these public and private charities is considered, the problem is a difficult one. The treasuries of the state of Pennsylvania, of the city and county of Philadelphia, and private funds, all are drawn upon to bear this burden of dependency. The state spends annually

nearly two million dollars in partially caring for Philadelphia's insane, feeble-minded, deaf, blind, and inmates of various private hospitals and homes. The city and county of Philadelphia spends something over two million dollars for the same purpose. Then, in addition to these four millions which are raised by taxation, there are all the funds raised by private subscription for the various private agencies. The greatest need in both city and state is for a centralizing body which shall untangle the finances, make some satisfactory plan as to the several responsibilities of city, state, and private agencies, plan a budget for the public appropriations, and help to standardize the relief given by both public and private agencies.

There is a State Board of Charities which, if its powers were enlarged, might find itself able to perform this much-needed service for the charities of the whole state. But an aroused and enlightened public opinion would be needed to back up the findings of this board and secure their embodiment in definite legislation. And already a private organization, known as the Public Charities Association, has been formed to do this educational work.

The Philadelphia citizen finds himself confronted with a variety of duties if he is to be a good neighbor to the unfortunate. He must pay his taxes, and must give of his private means to those charities that he selects as most deserving and most appealing. He must also give of his time in some of the ways in which volunteers are needed, for "the gift without the giver is bare." And, finally, he must help to add to the number of well-informed people whose interest and effort will, we hope, some day bring about a cure of the social disease known as poverty.

CHAPTER XIV

THE COURTS AND LAW OFFICERS

Wherever men have organized themselves into communities, they have established courts to settle disputes between private individuals and to enforce the law. Everyone knows a city community has its laws and ordinances which must be obeyed if the city is to be a safe and pleasant place to live in.

Another chapter will show us the significance of law and explain how laws are made for Philadelphia. At present we shall concern ourselves only with the way the courts interpret and apply the law in our city, either in the prosecution of an offender or in a dispute between private citizens. The former is known as a criminal case, while the latter is known as a civil case.

Magistrates' Courts.—When you see a policeman pick up a drunken man on the street and drive off with him in the patrol wagon, do you wonder what becomes of him? Usually he is kept over night in a cell in the police station unless his friends come and bail him out. The persons acting as bail have to give a bond or some kind of security



(Courtesy of the Municipal Court)

THE CHILDREN'S AUTO BUS

Children on their way to court no longer ride in a police patrol.

that the man will appear for trial. The next morning he is taken before a magistrate, who has come to the station house to hear cases. If he is not an old offender he is usually released on the payment of a small fine, with the costs of the proceeding often added.



(Courtesy of the Municipal Court)

GETTING CLEANED UP

This is one of the first experiences in the House of Detention.

other minor disputes relating to money matters up to one hundred dollars.

There are twenty-eight magistrates elected by the people, two-thirds by the majority party and one-third by the minority, for the term of six years. The magis-

The magistrates hear in the police station most of the cases of drunkenness, vagrancy, assault and battery, petty larceny, and breaches of the peace. They can also fine for such offenses as cruelty to animals and spitting on the sidewalk. They may sentence offenders in these cases, but for anything more serious they can simply hold the man for the grand jury. Then there is a central magistrate's court in City Hall, which holds night as well as day sessions. In their own offices the magistrates hear small suits relating to bills, claims, rents, and

trates are usually not trained in the law, and no record is kept of the proceedings in their courts. Now that the Municipal Court has been established, many of the civic bodies of the city have recommended that the magistrates' courts be abolished. But it is difficult to make any change, for the office of magistrate is provided for in the state constitution.

Municipal Court.—In 1914 the Municipal Court was founded. It was hoped that this would somewhat relieve the burden of work on the upper courts, and also would take many cases away from the magistrates and pave the way for their abolition. These hopes to a considerable extent have been realized.

Under the new arrangement the Juvenile Court (already established) became a division of the Municipal Court. The other divisions are: domestic relations, misdemeanants, criminal, and civil. We shall consider the divisions in that order.

Juvenile Division.—Philadelphia has no parental school; therefore, a boy or girl who plays truant from school too many times is likely to be taken to the Juvenile Court and brought before the judge. There was a time when a child who broke the law, either in this way or in some other, would be given a hearing in the same courtroom with the adults, who might be there for drunkenness, theft, or various other offenses. He might be given a ride in a patrol wagon and locked up over night in a police station. This was not good for the child.

In 1903 the present Juvenile Court law was passed in Pennsylvania; this made it possible to deal with children who do wrong in a separate court to which the public is usually not admitted. The judge acts as a sort of parent,

representing the interest which the community has in the welfare of every boy and girl; and he tries to find out, with the assistance of probation officers and others, why the child has failed to observe the rules which everybody has accepted. Bad home conditions or an undeveloped



(Courtesy of the Municipal Court)

PRELIMINARY HEARING

This boy is being questioned in a friendly way to determine whether or not he shall be brought before the court.

mind make it hard for some children to get on in the world. Consequently they have to be looked after, either at home by a probation officer sent by the judge, or in an institution where they will receive the training necessary to get along in the world.

Probation work began about thirty years ago, and

during the past ten years has grown wonderfully throughout the country. Many courts now have one or more persons attached to them whose special work is to furnish guidance to people, young or old, who get into trouble and are brought to the court. The probation officer makes a



(Courtesy of the Municipal Court)

CHILDREN WAITING TO BE EXAMINED

point to find out all about the man, woman, or child concerned so that the court can deal intelligently with the case.

There is a House of Detention connected with the Juvenile Court, where boys and girls may be held awaiting trial or pending the settlement of their cases. While in the House of Detention children attend school and also get whatever medical attention they require.

The Juvenile Court is not a place where punishment is meted out, but a place where children who have made a misstep will receive sympathetic treatment in the effort to prevent a recurrence of the trouble. Judge Ben Lindsey of Denver is the best known juvenile court judge in the world. Nearly everyone has heard or read about him.

Another work of the Juvenile Court is the care of poor children whose parents, through misfortune or neglect, cannot support them.



(Courtesy of the Municipal Court)

PRELIMINARY TEST

This boy is being tested to determine whether he is normal.

In case of misfortune, they are kept with their parents and an order is made on the county for their support. In case of neglect or vice or intemperance of parents, they are sent to institutions or boarded out with strangers at the expense of the county.

The theory is that the family is the foundation

of the state, and that it should be kept together if possible. The Juvenile Court can also deal with parents who are responsible for their children's wrongdoing.

Domestic Relations Division.—When the father of a family deserts, or does not do his duty by supporting his wife and children, the woman may complain to the Domestic Relations Division of the Municipal Court. An attempt is always made to get a man to do the right thing for his family. Sometimes he is made to pay a certain part of his wages each week to the court for his

wife's benefit, instead of to her directly. In the last resort he is sent to the House of Correction.

The methods in this court are immensely better than under the old system in the Quarter Sessions Court. The division has a number of probation officers and investigators. This court also deals with grown sons



(Courtesy of the Municipal Court)

HOUSE OF DETENTION

Study and work in a pleasant, sunny room.

and daughters who, being able, do not help support their needy parents.

Misdemeanants' Division.—There is another branch of this court which is known as the misdemeanants' branch. Here are brought young people over sixteen who for various reasons cannot be managed by their parents, and who stay out late at night on the streets or go with bad companions.

Criminal Division.—Then there is the criminal division

of the Municipal Court where persons are brought for stealing, fighting, reckless driving, and other offenses against persons and property. Here also offenders are often given an opportunity to pay back what they have stolen or to make good while on probation. If, however, a probationer does not live up to the conditions under which he is released, he is brought in and fined or sentenced to jail or prison.

Civil Division.—In the civil division of the court suits are brought for wages, damages for personal injuries, and numerous small claims. The court tries to settle claims promptly, and hopes eventually to make it possible for a poor man to conduct his own case if necessary. Many cases are heard without a jury.

Continuity.—The policy is to keep the same judge sitting in a particular branch so that he will acquire skill in handling a certain class of cases. In Chicago there is a court for traffic cases only, such as fast driving, in which the same judge sits continuously.

The Jury.—A jury is a body of twelve men selected from the assessor's list for the purpose of deciding the facts in each case. The judge guides them in matters of law and makes the final decision, known as a judgment, after they have settled the questions of fact by their verdict. It is unfortunate that under our system the judge, who is generally the most skilled person in court, has so little to do with settling the case. The plaintiff, who brings the suit, and the defendant, who is sued, may waive a trial by jury in civil but not in criminal cases.

Article 6 of the Constitution of the United States prevents doing this, on the theory that he cannot risk and the jury system is rapidly being

abandoned, and there is a tendency in that direction in the United States.

The fees for beginning suit in the Municipal Court are still too high, being the same as in the Court of Common Pleas. This tends to throw the small claims into the magistrates' courts, which can decide claims up to one hundred dollars. However, claims amounting to more than \$5.33 can be appealed to the Court of Common Pleas.

A Lawsuit.—Suppose a man cannot collect a bill for five hundred dollars which is owing to him, so he institutes a suit in the Municipal Court. After the claim has been filed, the proper papers served on the man who owes the money, known as the defendant, his answer filed, and the day fixed for trial, the suit is ready to be heard.

First, the plaintiff's attorney—the plaintiff is the man bringing the suit—states his side of the case; and tells what evidence he proposes to introduce to sustain his claim. The defendant's attorney then does the same for his side of the case. Witnesses for the plaintiff are then questioned by the plaintiff's attorney and cross-questioned by the defendant's attorney; after which the process is reversed, and the defendant's witnesses are questioned and cross-questioned. (Had this suit been brought in the Court of Common Pleas, the witnesses for the plaintiff would have been heard before the defendant's side was presented at all.) The defendant's lawyer then makes a closing argument, and the plaintiff's lawyer makes the final argument. The judge now instructs the jury, if there is one, how to apply the law to the facts in hand. After retiring from the room the jury returns and renders

its "verdict." That is, it finds from the facts and the law in the case whether the defendant owed the money to the plaintiff. The defeated party may ask for another trial, which is either granted or refused by the trial judge. This ends the case, unless it is later appealed to a higher court.

Appeals.—If either party is not satisfied with the result of a civil case before a magistrate, he may appeal to the Court of Common Pleas. Likewise in some criminal cases the defendant (person on trial) may appeal to the Court of Quarter Sessions. The same judges preside in both these courts. All appeals from the Municipal Court are heard by the Superior Court. All constitutional questions are finally decided by the Supreme Court.

Common Pleas Court.—The judges of the Common Pleas courts are elected by popular vote. In Philadelphia there are five courts of Common Pleas with three judges for each. They are all courts of record; that is to say, the proceedings are all recorded so as to be permanent. In these courts are begun nearly all cases involving any large amounts of money, such as suits on contracts and on personal injuries or torts. They also have equity jurisdiction. By this is meant that where there is no adequate remedy at law they will help the injured party.

Torts.—Most of the cases of personal injuries come under the head of torts. The biggest class of cases comes out of personal injuries sustained on public conveyances, trains, and trolleys.

Contracts.—A contract is an agreement between two or more parties to do or not to do a certain thing. It is the business of the courts when there is a dispute to ascertain whether there is a contract, and if so, what was the intention of the parties in making the contract.

Criminal Courts.—The same judges sit in the Court of Quarter Sessions of the peace and the Court of Oyer and Terminer and general jail delivery. These are the two criminal courts in which are tried nearly all offenders held by the magistrates or indicted by the grand jury. The former tries all lesser crimes, while the latter tries cases involving murder or manslaughter.

Grand Jury.—The grand jury is composed of twenty-three men selected by lot from the list of registered voters. They hear the evidence against various people, and if they feel that the facts are strong enough they return what is known as "a true bill" or indictment. The indicted man then goes to trial. If they do not feel that the evidence against the person is sufficient they return the bill "ignored."

The grand jury is supposed to visit the public buildings in the county, such as the poorhouse and the prisons. It also makes investigations occasionally into matters regarding the morals of the community. The men first selected for jury service are known as veniremen; the men called later, after the panel or list of men summoned is exhausted, are called talesmen.

Orphans' Court.—The Orphans' Court has charge of the estates of deceased persons, and account has to be made to it for the distribution of the estates. It also appoints guardians for minors to whom property has been left. This court is one of great importance, because in its hands rest the welfare and happiness of many widows and children.

Superior Court.—The Superior Court was created in 1895, to relieve the pressure on the Supreme Court from the numerous appeals from lower courts. These appel-

late courts do not hear witnesses and do not have a jury. They take up only questions of law, based on alleged errors before the trial court. The law of evidence is intended to keep a case within certain bounds, so that the parties (litigants) shall try to establish their contention in the most direct manner and with the best evidence procurable. For example, if you were the only witness of an accident you would be the best one to testify and not your brother whom you told about what you saw. If the appellate court finds that the law has not been properly interpreted in regard to a case, it orders a new trial, or it may reverse or affirm the decision of the court below.

On the criminal side the Superior Court hears all appeals from the Court of Quarter Sessions, and from Oyer and Terminer except cases of murder which go directly to the Supreme Court. It hears all appeals from the Common Pleas and the Orphans' Court not involving more than fifteen hundred dollars. Under certain circumstances cases may be appealed from this court to the Supreme Court, especially if the state or federal constitution is involved.

Supreme Court.—The Supreme Court, as its name suggests, is the highest court in the state and is the final court of appeal within the state. In a few instances cases may originate in this court. As in the Superior Court, the judges consider only questions of law, all facts having been settled by juries in the trial courts below. No law enacted by the legislature really becomes a fixed part of the whole body of law until it has finally been passed upon by this court, and declared to be in agreement with the f the United States and of Pennsylvania.

Of course, many cases go on to the Supreme Court of the United States for final settlement, but this is the exception rather than the rule.

Reform of the Courts.—In recent years our courts have come in for a great deal of criticism. Many people have felt that the poor man has no chance because he does not have money enough to carry his case up to higher courts and to pay lawyers' fees. Fortunately the courts themselves are trying to overcome this feeling by doing everything they can to give a man with little or no money a chance. In Los Angeles there is a Public Defender who sees to it that the defendants get a fair trial.

Moreover, it has been urged that the courts are slow in getting their business disposed of. It is true that our courts are not so well organized as those of England, where not only the bench but also the bar is so organized as to give the best results. Furthermore, the very court procedure itself and the law of evidence have been very difficult for the ordinary person to understand and very easy for a lawyer who is dishonest to turn to his own ends, which may not be those of justice. Under these conditions men who are really guilty of crime often escape punishment and no doubt sometimes those who are not guilty suffer.

Our courts and our associations of lawyers are thinking and working on these problems. The courts do not claim to be perfect and therein lies the hope of reform. The people are not made for the law but the law for the people. The courts are only social agencies, like the school or the Department of Public Works.

Methods of Selecting Judges.—There are three methods of selecting state judges: (1) election by the people, (2) appointment by the Governor, and (3) election by the

Legislature. The first is the most common method and the third is very rare. All judges in Pennsylvania are elected. Some people feel that better judges would be secured through appointment by the Governor than by popular election. The federal judges are all appointed by the President.

Appointive Power of Judges.—The Board of Judges of the Common Pleas Court in our city has, in addition to judicial powers, appointive powers. The members of the Board of Education are appointed by the judges, likewise the Board of City Trusts, the Board of Viewers, the Board of Revision of Taxes, the Fairmount Park Commission, Inspectors of County Prisons, and others. This power was placed in the hands of the judges in the belief that the important matters with which these boards had to deal would thus be better managed. Some of Philadelphia's most distinguished citizens have served in these appointive offices.

License Court.—These same judges, moreover, sitting as members of the Quarter Sessions Court, also have the responsibility of granting liquor licenses. This duty often brings them severe criticism, especially when they permit a saloon to open in a neighborhood where many residents oppose it. The question of prohibition and local option is becoming increasingly important, and people do not like to have this matter so completely out of their control and placed in the control of the courts.

The Bar.—Lawyers as a group are spoken of as "the bar." To be admitted to the bar nowadays in most states requires many years of study and a vigorous examination. This is true especially in Pennsylvania. In recent years the standards for admission to practice law in the courts

have been raised. Unfortunately, the legal profession has become somewhat of a business. Some men have often gone into it to make money rather than primarily to see that justice is done. However, our state and national bar associations and our university law schools seem to be on the road to produce the right kind of lawyers.

Clerks of the Courts.—The Prothonotary is the clerk of all the civil courts in the county except the Orphans' Court. He is appointed by the Board of Judges. He has a number of subordinates, for in a county like Philadelphia there is a large volume of work and much responsibility in keeping the court records. An additional clerk, elected by the people, is provided for the Quarter Sessions Court. It is not apparent why the Prothonotary should not render the same service for this court as he does for the others, nor why one should be appointed and the other elected. The criminal division of the Municipal Court comes under the clerk of Quarter Sessions.

Tipstaves.—Every court has officers known as tipstaves, who are appointed by the judges. These men are merely attendants.

Criers.—Every court has a crier who opens court by making a certain announcement when the judge enters the room. The form of this announcement is often amusing, since the criers are still using the same words that were used several hundred years ago. Everybody in the court room rises and stands until the judge takes his seat.

Constables.—Another officer, elected by the people, is known as the constable. He serves writs and does other work for the magistrates' courts somewhat corresponding to that of the sheriff for the county courts. Each magistrate has two or three connected with his office.

Prisons.—In Philadelphia we have the House of Correction, the county prisons at Holmesburg and Moyamensing, and the Eastern Penitentiary, which is a state prison. Moyamensing is used principally for those awaiting trial.

Prison Reform.—We have seen how the courts are being reformed. The same thing is happening to the prisons and jails. Society has found that to put a man into a damp cell, feed him on bread and water, dress him up in stripes, and let him live in idleness, as used to be done and still is done to some extent, is not the way even to punish. Prison reform to-day aims at making the prisoner a better man by keeping him healthfully employed, by providing opportunity for schooling and for learning a trade so that he can earn his living when he gets out, and by giving him new ideals of conduct. Moreover, the modern prison does not believe in solitary confinement, the striped suit, nor the lockstep. In other words, we want to make a man instead of to break him. Society wants to save even those who commit serious crimes. It wants to fit them for a return to a place in the world. There was a time when the lot of the released prisoner was a hard one. Nobody wanted to hire him if he had no references; but to-day there is more of a willingness to employ him, especially if he has learned a trade. There are societies to help discharged prisoners. When Thomas Mott Osborne was warden of Sing Sing prison he established a Mutual Welfare League among the prisoners. This provided for self-government of the prison by the men themselves and the plan worked splendidly.

Indeterminate Sentence.—Many judges now, where the law permits, are not sentencing offenders for a definite

period, based on the seriousness of the crime, but for an indefinite period, usually with a minimum depending on their behavior while under confinement. In other words, a man's stay in prison is determined by his own needs, such as education, moral training, a trade, by the way he improves while in prison, and by many other things.

Parole.—Parole really follows the indeterminate sentence. The man when released gives his word that he will make good if he is freed. If he does not keep straight he is brought back to prison to serve out his complete sentence.

Suspended Sentence.—One of the new ways of dealing with first offenders is to sentence them, and then to suspend sentence on condition that they give up drink, stop stealing, or abandon whatever it is that has brought them before the court. This has been found to be an excellent way of giving a man a chance while still keeping a firm hold on him in case he resumes his old ways.

Capital Punishment.—Hanging and electrocution are known as capital punishment. This has been abolished in some states and life imprisonment is the most severe punishment. It is doubtful whether capital punishment reduces crime.

Sheriff.—Turning now to some of the officials connected with the courts, we come to the Sheriff. The office of sheriff used to be much more important than it is to-day. This officer stands for the peace of the county over which he has charge, but his police powers are rapidly dwindling. He keeps prisoners awaiting trial in the county jail, and his deputies serve warrants of arrest for the courts. His principal work is serving

writs, which mark the beginning of a lawsuit. He sells property to satisfy judgments secured in the courts; that is to say, if the losing party in a suit cannot pay, his property can be sold. He sells the property of those who fail to pay their taxes and gives notices of elections. He and the Coroner are county officers provided for by the constitution.

Coroner.—The Coroner should really be a medical examiner and is so in some states. In Pennsylvania he is a sort of judicial officer, and assisted by the coroner's physicians holds inquests or examinations into cases of sudden death. He has a jury consisting of six men, who render the final verdict. Some believe that the Coroner is no longer needed, and that under modern conditions all of his work can be done by the police with the assistance of medical advisers.

City Solicitor.—The City Solicitor is the legal adviser and attorney for the city. He conducts its cases in court; advises its officers; prepares and approves contracts; is required to make daily returns to the City Controller of all moneys received, including fees for preparation of contracts, bonds, etc.; approves all securities, and keeps a registry of contracts, bonds, etc. Although he is legal adviser to the Mayor and his cabinet, he is elected by the people rather than appointed by the Mayor.

District Attorney.—The District Attorney is the prosecuting officer in all criminal courts except those of the magistrates. Every crime is an offense against the commonwealth, and he represents the state in all these cases and sees that its rights are guarded.

Recorder of Deeds.—There are two other county

officers whose duties are such as to bring them fairly under the designation of "law officers." These are the Recorder of Deeds and the Register of Wills. The Recorder of Deeds has charge of the records of all transfers of real estate from one person or corporation to another, and of all mortgages on real estate granted by the owner as security to someone who has presumably loaned him money. The recording of the deed is to protect the purchaser against a later fraudulent sale of the property, by the original owner, to a third party. The recording of the mortgage is to protect the holder of the mortgage against a later mortgage given by the owner to a third party, and also to show any purchaser just what incumbrances (debts) are against the property.

Register of Wills.—This official is far more than a custodian of legal papers. He not only keeps the records of all wills probated, but he exercises judicial authority in the settling of estates. He admits wills to probate, deciding which will is valid when more wills than one are discovered. When no will can be found the Register of Wills appoints an administrator. He receives the final accounting from the executors or administrators and files it with the Orphans' Court, of which he is *ex-officio* the clerk. But it is to the judge of the Orphans' Court that the executor or the administrator must look for discharge papers when the estate is finally settled.

The County.—Frequent reference has been made to "county" officials, so that a brief discussion of the county may be helpful to the reader. Counties are the principal subdivisions of the state or commonwealth. As public corporations they have the right to own property

for public purposes, to sue and be sued, to erect public buildings, and even to lay and collect taxes.

County officials not only enforce their own local ordinances, but they help to enforce state laws as well. Practically all of these officials are elected, which gives the people of each county a large measure of what is known as "home rule." Other county officials, such as the county commissioners, not described in this chapter are mentioned in other chapters of the book.

Since the Consolidation Act of 1854 the city of Philadelphia has been extended to cover all of Philadelphia County. Unfortunately, as many people think, the city and county offices were not merged at the same time. As a result, there exists some overlapping of jurisdictions. Efforts have been made repeatedly to effect a real combination of city and county, with the elimination of unnecessary offices and a better assignment of duties to those that remain.

County Officers in Philadelphia Elected by the People

Sheriff

Coroner

Register of Wills

Recorder of Deeds

Three County Commissioners

City Treasurer

City Controller

Clerk of the Courts

District Attorney

[Notwithstanding the fact that their titles seem to indicate that they are city officials, both the City Controller and the City Treasurer are county officials.]

CHAPTER XV

HOW THE CITY LAWS ARE MADE

Communities Need Rules and Regulations.—We have seen in previous chapters how by living closely together in cities and towns people secure certain benefits, such as protection from dangers, a greater number of conveniences, advantages in trade and manufacture, streets and roads, sewage disposal, and assistance in many other ways. We have also seen how close living together creates certain bad conditions which must be carefully guarded against. There is constant need, therefore, for all of the members of the community to act together to increase the benefits and to overcome the evils. Accordingly, certain rules are made by the community as guides for the members. When these rules are made by cities we call them ordinances; when made by states or by the United States we call them statutes or laws. These may be for the purpose of prohibiting certain action on the part of persons, as for instance the laws against murder or burglary; or they may be for the purpose of planning and providing for community enterprises, such as streets and water works. The process of making laws and ordinances is known as legislation. The making and enforcing of these community rules is the essence of government.

How the Rules are Made.—When self-governing communities are very small, it is possible for all the people to gather in one place to discuss matters of common

interest and to decide what shall be done. In colonial times it was possible for all the townspeople to assemble in a church or a hall, where each person could express his views and cast his vote directly on all these matters of health, schools, police, streets, parks, and the many other things that the members of communities have in common. But as towns grew larger it became harder to hold meetings of all the citizens. So we have had to adopt the plan of choosing one person and letting him speak for a large number. A person so chosen is the representative of the group, and so we call this "representative" government. The group which has such a representative is called the "constituency" of the representative, and the individual persons of the group are known as "constituents."

Lawmaking in Philadelphia.—Now what kind of lawmaking body has Philadelphia? To find that out we must go to the fourth floor on the north side of City Hall. There we shall find two large rooms, with high ceilings and galleries, paneled and decorated walls, and with many desks facing a raised platform on which is a high desk. The floors are covered with thick carpets, and many electric lights throw a rich glow over the whole scene. In one of the rooms there are more desks than in the other. We learn that the lawmaking body for Philadelphia has two parts, a Select Council of 48 members elected for four years and a Common Council of 90 members elected for two years. These 138 men stand for nearly two million people.

If we should make our visit when Councils are in session we should see these members, some sitting at desks strewn with papers, some standing around smoking

and apparently paying no attention to anything, and others talking in groups of two and three. There is much noise and confusion. Once in a while the man sitting up on the high platform pounds the desk in front of him with a small mallet, called a gavel, and occasionally a clerk who sits just below him rises and reads some document very rapidly. At a table to one side, half a dozen newspaper reporters are talking and occasionally scribbling down notes. Ordinarily it is very hard for the visitors in the gallery to make out what legislative action is being taken. Once in a great while some man makes a speech to which the members listen.

But if we watch closely we shall see that under all the confusion there are certain rules according to which the business is carried on. Even with relatively small legislative bodies there must be such rules, otherwise nothing would ever be accomplished.

The principal officials charged with keeping order in Councils are the presidents of Select and of Common Council, elected by the members of the respective chambers. When Councils are in session these presidents sit on the platforms mentioned above and guide the proceedings according to the rules. Besides the presidents there are sergeants-at-arms, clerks, door-keepers, and messengers to assist in carrying on the work of each branch. There is a regular program, or order of business as it is called, for these sessions.

How an Ordinance is Passed.—When Councils pass an ordinance the simplest formal procedure is briefly as follows. A member of Councils rises at his desk and reads a bill which he wishes to introduce and have passed. The title must express clearly and definitely the subject

with which the bill is concerned. He must have a written copy to give to the clerk at the same time. The president then refers it to the proper committee of Councils, which, if it approves the measure, will report it back to the main body with a recommendation that it be passed. Before the bill is reported back by the committee it has been printed and each member has been given a copy, which he keeps in a "bill book" on his desk. When the committee makes its report the bill gets its "second reading," this time section by section and paragraph by paragraph. The members now have the opportunity to offer arguments for and against it and to make amendments to it. Finally the bill is read for the third time, which reading may be by title only. The rules of Select Council require that these readings must be on different days. By this time the members are supposed to be sufficiently well informed as to what the bill contains to be ready to vote on it. The roll is then called and each member present, unless excused for some good cause, is compelled to vote yea or nay on the measure. If a majority of the elected members vote in favor, the measure is adopted. It must then go through much the same course in the other branch of Councils. If it is passed there also, it must finally be approved by the Mayor before it becomes a law. The procedure is not always as simple as that outlined above. There are about three hundred "points of order" which specify just how members are to proceed in the business of legislation. These are explained in detail in the Manual of Councils of Philadelphia.

Committees in Councils.—With the large number of matters that come before Councils, the large member-

ship, and the limited time in most cases in which to act upon these matters, it has become necessary to divide the work among smaller groups of councilmen known as joint standing committees, of which there are now twenty-seven. Each of these committees is composed of twenty-four members, twelve from each branch of Councils. In that way the work of one committee serves both houses. The presidents of Councils appoint these members and are themselves members of all the committees. The appointments are made at the beginning of each session, and thereafter all matters pertaining to the subject assigned to the committee are referred to it. It is the duty of these committees to investigate these matters, to report back to the general body what they have found, and to make recommendations regarding proposed legislation. These reports are either typewritten or printed, are signed by a majority of the joint committee, and are reported to the chamber of which the chairman of the committee is a member.

Some of these committees are assigned much more important duties than others. In fact, three of the twenty-seven committees are of more importance than all the rest combined. These three are the committees on Highways, on Surveys, and on Finance; and of these three the Finance Committee is by far the most important, for it makes recommendations on all matters which involve the spending of money, which includes nearly everything the city does.

The Mayor's Veto.—The Mayor of Philadelphia has an important part in the making of laws, although he is usually considered an executive rather than a legislative official. After a bill has been passed by Select and

Common Councils it comes before the Mayor. If he approves the bill he signs his name at the bottom of it and the bill becomes a law. Or, if he does not sign it he may show that he has no serious objection to it by taking no action at all for ten days. In that case also the bill becomes a law. If, however, he does not wish the measure to pass he vetoes it. In this case the Mayor returns the bill to the branch of Councils in which it was first introduced, with a message stating his reasons for withholding his consent. The measure is killed thereby unless Councils repass it, within five days after the veto, by a favorable vote of three-fifths of the members of each branch. Usually when the Mayor vetoes a bill that veto applies to the whole measure; but in the case of appropriation bills he may disapprove certain details, or items, and approve others.

The presidents of the two bodies of Councils are also important officials in the passing of legislation. They are like umpires in a game and much rests upon their fairness and their knowledge of parliamentary practice, as the rules of procedure of legislative bodies are called. They also have the power to appoint committees which, as we shall see, are very important and influential in determining the course of legislative matters.

Whom Does a Representative Represent?—How does this arrangement for legislation result in the community's getting the laws it wants? It seldom happens that the citizen elected as a representative is the choice of all the people in his district. Some could not vote; others voted for some one else. But after a certain man is chosen, he is supposed to be the representative of all the people in his district, not merely of those who voted for him.

Sometimes representatives who are narrow-minded forget this and act as if they represented only those who voted for them.

Our councilmen are not paid for their services, but a number of them hold paid positions in the county offices. Many people wish to see this practice abolished, for they believe that councilmen who receive their living from the executive branch of the government are not in a position to act freely and to represent the people in making laws for the guidance and support of the executive departments.

Constituencies of Philadelphia Councils.—In the city of Philadelphia a peculiar condition exists. In the first place, the groups which send representatives to City Councils are very different in size. The city is divided up into forty-eight districts called wards. Some of the wards are many times larger than others. For instance, the Twenty-second Ward, the largest in population in the city, has 70,000 inhabitants and 14,400 voters. The Ninth Ward, on the other hand, has only 5,000 persons and 900 voters. Yet each ward has the right to elect one member of Select Council.

As for the Common Council, each ward is entitled to one member for every 4,000 men of voting age, but every ward may have at least one councilman. This has worked out so that twenty-two wards each have one councilman, although they differ very much in population. The largest ward (40,000 people) with one common councilman is eight times larger than the smallest ward, which has only 5,000, and there are several that are five and six times larger than this smallest ward, as may be seen on a chart of the wards. T

are marked irregularities also in the wards which have two and three common councilmen.

So we see that the constituencies for councilmen in Philadelphia are very unequal in size, and therefore that the representation is unequally distributed. In many cases the ward lines have remained stationary while the population has been growing more and more dense in some wards and smaller and smaller in others, because stores, warehouses, and factories have taken the place of the dwellings in which families used to live.

Many people have come to think that the city ought to be reapportioned, or redistricted, as the process of revising and equalizing the constituencies is called. They also think that to have a legislative body divided into two parts is cumbersome, since in so many cases the select councilman and the common councilman represent exactly the same constituency. In other words, they say it is unnecessary to send more than one representative from the same constituency. It has been found in practice in Philadelphia that the two branches almost invariably agree on all matters, and that the idea that one body will be a check on the other has no foundation in fact. It is also thought that the number of councilmen ought to be reduced. (See Census Bureau report on size of Councils in various other cities—General Statistics of Cities, p. 50.)

Committee Organization.—Another feature of the present arrangement that seems to stand in the way of truly representative government is the great power that legislative committees have. A committee is supposed to have made an investigation on the bill referred to it, and hence its report has much weight

with the other members and is usually accepted. On the other hand, a legislative committee frequently does not bother to make any report at all if it does not approve of a proposed measure; and by thus neglecting the measure the committee can postpone discussion and a vote indefinitely. It has become so customary to sidetrack bills in this way that certain committees have come to be known as "pickling" committees.

We have noted above that to three of our twenty-seven committees in Councils are assigned the most important work of that body. As a matter of fact, a small group of men hold positions on more than one of these three committees and in that way a few are able to control all the important legislation.

Many people think that because we have a large number of councilmen the people are better represented than if we had a smaller number. But other people point out that by the present system of committees a few men from a few neighborhoods can govern the city, and that so long as these men keep the people of their own small districts satisfied the rest of the city is powerless to get what it wants.

One of the worst features about having the important work of legislation carried on in committees is the secrecy with which it is usually done. Sometimes these legislative committees, in the course of their investigations and when they have some very important matter before them, hold meetings at which citizens are invited to come and speak for and against the measure, ask questions, and debate the matter. These meetings are usually called "public hearings." Many citizens were very

much pleased when in 1916 the meetings of the Finance Committee were thus opened.

The Recall.—As things are now in Philadelphia, once a man is elected he cannot be removed during his term of office except by impeachment for very grave crimes. It is often pointed out that the private employer can discharge an unsatisfactory employee without having to prove him guilty of some very serious offense, and it is argued that the people also should have this power. Various changes have been suggested. One of these, "the recall," provides for the filing of a petition, signed by a certain percentage of the qualified voters, asking for the recall or dismissal from public service of the official against whom the petition is directed. An election is then called by which the voters can decide whether or not they wish to retain the official in office. Generally, provision is made for the voters to elect a successor to take the place of the recalled office-holder.

Direct Legislation.—It has very often happened that the people have had difficulty in getting their legislative bodies even to consider measures upon which they wished action. In order to get such action the "initiative" has been devised, and is in use in some states. Here again the beginning is made by petition. This sets forth the law that is desired. When the petition is filed with the election officials, with the required number of signatures of qualified voters, an election is called for deciding whether or not the proposed law is to go on the statute books. Where the initiative is in force, the mayors cannot veto the measures passed by popular election.

In order to enable the people, independently of their representatives, to cancel from the statute books unde-

sirable legislation, the "referendum," sometimes called the "voters' veto," has been put into operation in some places. On petition, properly signed, an election is called by which the voters can signify whether they wish a bill which has just been passed to become law.

It is often said that where the voters have these means of controlling their representatives it becomes unnecessary to use them, because the representatives remain more attentive and responsive to the opinions of the electorate, and thus help to further true representative government. Neither Pennsylvania nor Philadelphia has as yet adopted the recall, the initiative, or the referendum. Although they have been put into operation in many states and cities, they have never been given up where they have once been tried.

How the People May Control Legislation.—As things are now, if the people of Philadelphia are dissatisfied with a law they may voice that dissatisfaction by refusing to reelect the representatives who passed the legislation, and by voting for other representatives who are pledged to repeal it; or, they may persuade the Mayor to veto it. The people may let the representatives know what they think about the matter before the law is passed or the session of the legislature is ended. They may do this by writing letters or sending telegrams directly from the voter to the representative, by circulating petitions, by passing resolutions in clubs and associations, by expressing their opinions in the newspapers or in pamphlets, and in many other ways. Citizens can hardly expect satisfactory legislation if they themselves do not care enough to let their representatives know what they want.

It is also necessary for them to watch closely what laws are introduced, what becomes of these bills, what members vote for them, and many other things. Sometimes citizens form themselves into organizations to watch legislative bodies, to prevent what they consider undesirable legislation, and to promote laws which they think will improve conditions. Business men's organizations and various civic associations have committees to keep in touch with what goes on in Councils. And many state and national organizations have local branches to look after legislation which affects Philadelphia and Pennsylvania.

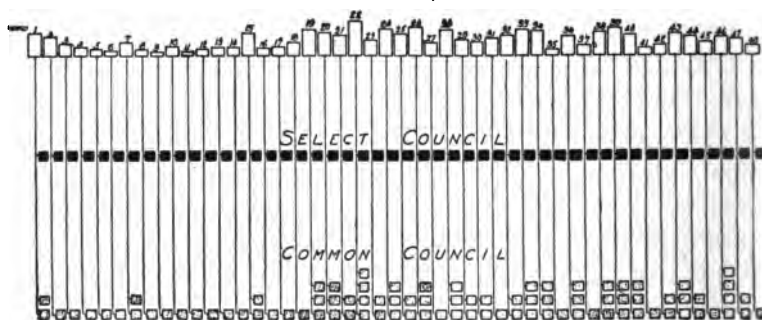
Commission-Manager Government.—A new form of government for cities is being tried in some smaller places. It is called the commission-manager form of government and is much like the organization of a private corporation. Instead of a large number of councilmen this plan provides for a few "commissioners" elected by the people. These commissioners attend to all the local legislation and also hire a trained man as "manager" to see that their plans are carried out. The manager is non-partisan and holds his position for an indefinite length of time, that is, just as long as the commissioners are satisfied with his work. In this way officials can be held responsible for the success or failure of their actions, whereas in a complicated organization such as we have in Philadelphia it is possible for one official to blame other officials whenever citizens complain of poor service. As a stage in the development of commission-manager government there has been commission government. Instead of a Mayor and Councils the people elect five commissioners who pass the laws and also

act as the heads of the five main departments of the government.

Appropriation the Most Important Legislative Act.—Ever since governments have existed the question of taxes—that is, the money collected from citizens and spent to maintain the government—has received a great deal of attention. Civil wars have been fought over the question. Our own Revolution, as we know, grew out of the question of taxation. Citizens who ordinarily are very little interested in public affairs are frequently deeply concerned with taxes, so that legislative bodies give much attention to the subject. There are two phases to the question: first, how the money shall be raised, through taxes, payments, etc.; and second, how it shall be spent or appropriated. People are ordinarily much more interested in the first phase than in the second, but appropriations are of very great importance, for they largely determine all the other matters in government. Unless money or other means are provided for carrying out a law it is apt to be ineffective. It requires money to hire policemen, to build streets, roads, bridges, and buildings, to take care of the sick, to protect foods, to educate children, to inspect factories; and the amount of money devoted to these things determines how much shall be done. We therefore hear it constantly said that the appropriation fixes the policy for the period of time covered by the appropriation act. This matter is fully discussed in Chapter XVI.

Conclusion.—Of all the branches of government none is more important than the legislative, none touches our lives more closely, none has more power for good or evil to the community; none, therefore, is more deserv-

ing of study and attention from citizens. For no offices should the candidates be chosen with more care, to see that they are honest, intelligent, and public-spirited. No officers have a greater obligation to perform their duty faithfully.



**A COMPARISON OF THE POPULATION OF WARDS IN THE CITY AND
THEIR REPRESENTATION IN CITY COUNCILS**

The upper line represents the relative population of the different Wards.

CHAPTER XVI

MEETING THE COST OF GOVERNMENT

Why Our City Needs Money.—Our city government, as we have seen, is a coöperative undertaking which is carried on by the people in order to obtain benefits and services. Its activities are extremely varied. As a group, the people of Philadelphia hire policemen, filter and pump water, construct streets, bridges, and sewers, take care of the sick, teach children, provide parks and recreation centers, and do many other things for the common good.

Now, we all know that money is needed to run a private business, for people must be hired; supplies, materials, and equipment must be purchased; and many other things requiring money must be done. The public business is just like a private business in its need for money, and this requirement gives rise to numerous important problems of government. These problems are known as "financial problems" because they are concerned with the finances—that is, the money and other property—of the government. In addition to being financial problems, most of them have social bearings of very great importance.

What Philadelphia Now Owns.—At present our city owns the City Hall, the gas works, Fairmount Park, the water works, over 1,600 miles of streets and roads, bridges, schools, police and fire stations, hospitals, wharves, docks, Liberty Bonds, machinery, boats, dredges,

equipment, money, and almost every other kind of property. Although we do not know exactly what the city's property is worth, we are safe in assuming that its value is at least \$600,000,000, or over three hundred dollars for each man, woman, and child living in the city.

How the Common Inheritance was Built Up.—This property has been accumulated by the city in many interesting ways and throughout a long period of time. In the very beginning, William Penn, in laying out the city, set aside certain pieces of land for streets and parks. Since that time many other citizens have given land, buildings, money, works of art, and other things. In addition to these gifts the city has acquired property by purchase and construction at a cost of more than \$400,000,000. Some of the city's property has, of course, decreased in value since the city obtained it. Buildings and machinery become out-of-date and useless, street pavings wear out, water and gas mains become rusty and rotten. On the other hand, the increased value of the land has more than made up for this depreciation. Some pieces are worth many, many times what was paid for them. For example, in 1816 the city bought Independence Hall, Congress Hall, and all of Independence Square—in other words, the entire block of ground bounded by Chestnut, Walnut, Fifth, and Sixth Streets, with the exception of the small property on Fifth Street which belongs to the American Philosophical Society—for \$70,000. That land alone, quite aside from its priceless historical associations, is now worth at least twenty-five times that purchase price.

Certain it is that the ownership of this vast amount of property by the city is of immeasurable value to all of

us. For, if it were owned by private persons who would want a net return for its use of only six per cent a year on its value, the expense of running the city would be about double what it now is. This means that we should have to pay about twice as much for what we receive from the city, or else do without some of the benefits and services which we now enjoy.

The City has Debts as Well as Property.—We have just seen what the city owns and what that ownership means to us. Let us now look at another side of the picture. It must not be imagined that the city has this large inheritance completely free of debt, for Philadelphia now owes about \$138,000,000.

These liabilities or debts, like the assets, are inheritances of past years, and just as the assets bring benefits so the debts carry with them burdens. About \$5,000,000, or one-ninth of the city's present total income, is needed to pay the interest on this indebtedness. Some of this debt was incurred for things which long since have been used up, and are therefore of no present value to us. Items such as coal, food, salaries, wages, stationery, Fourth of July celebrations, and New Year's Day parades, have been paid in some years with borrowed money, on which we now are paying interest, and which we eventually must repay. To that extent the past generation has handed us a burden, pure and simple. The greater part of the debt, however, represents money borrowed for the purpose of adding to the city's assets—that is, for buying land, erecting substantial buildings, laying out streets, constructing sewers, etc.

Our Ancestors Left Us a Real Inheritance.—So we see that, although a large debt has come down to us,

we are the heirs of assets so much greater in value than the debt to which we also fall heir that we can say truthfully that our ancestors have done much to make our lives happier and easier. In the first place, they left us an inheritance of more than \$462,000,000 worth of net assets—that is, excess of assets over liabilities. In the second place, they have left us an amount of property equivalent to the debt, the ownership of which is of very great advantage to us. For, although we must pay interest on the debt until it is paid, we are enjoying the use of the property at a much lower cost than if it were rented by the city. And when the debt is paid the cost will be still lower, for there will no longer be any interest to pay on the debt. Moreover, in many cases the city has had the advantage of lower prices than those which it would have been obliged to pay had it deferred purchasing properties until it had accumulated out of its income sufficient money for the purpose.

Our Duty to Future Citizens.—It is apparent from what has just been said that each generation of citizens falls heir to the property which the city owns at the time. Just what our part in building up this inheritance should be is a much debated question. Some people feel that we owe nothing to posterity; others feel that we owe a great deal. A sort of compromise has been worked out. As a rule, whenever expensive purchases or improvements are undertaken the burden of paying for them is spread over a number of years. This practice is defended on the grounds that it would require too heavy a contribution for the citizens to make in a single year, and that as the citizens of future years will reap

benefits from the property it is but fair that they, or at least some of them, should pay part of the cost.

Making an Undertaking Finance Itself.—As citizens come to see that their government is, to a very large extent, merely a business undertaking, and as they realize the great benefits which come from community ownership of enterprises which serve all citizens, city governments undertake more and more activities. Philadelphia, for instance, in addition to owning markets, a splendid water works, and a gas plant, has lately undertaken an elaborate rapid transit system, a belt line, a series of port improvements, and a golf course. Some other cities operate canals and ferries, cemeteries and crematories, electric light and power plants, ice plants, model homes, lodging houses, and a variety of other projects. All of these things are, or can be made, revenue-producing; and if they are worth while, according to the standard we have set forth above, they can be made to "finance" themselves completely. To do this it is only necessary to charge those who receive the benefits of the undertaking car fares, tolls, water rates, fees, rents, etc. These must be sufficient to meet all current operating expense and, in addition, to provide enough profit in the course of a given number of years to cover the entire cost of the property, including extensions and improvements, and also interest on the cost until that cost has been wiped out completely.

An undertaking cannot be said to have financed itself completely until it has returned sufficient revenue to do these several things, quite regardless of whether the city actually borrowed the money or provided the cost out of its past savings or out of current revenues. When

the enterprise has finally paid for itself, it is, of course, only necessary to get sufficient revenue to meet the running expenses, unless additional revenue is desired for other governmental purposes.

But some government activities—schools, health, charities, police, courts, and the general management—are of such a nature that they cannot be financed in this manner. There would be endless complexity, annoyance, and additional expense if an attempt were made to seek out every beneficiary of each of these services, and collect from him his just share of the cost. It might be possible to pay for maintaining the streets, as is the practice on toll roads, but think how annoying and also how very expensive such a procedure would be.

Activities that Benefit Some People More than Others.

—Governments do a great many things primarily for the people as a whole that do not resemble ordinary business undertakings, but which, nevertheless, benefit particular individuals to a much greater extent than others. Therefore, it seems but proper that those individuals should meet all, or a large part of the cost of such services. Administration of the courts, recording of deeds, mortgages, wills, adjudication of estates, and the issuance of marriage licenses are examples of this kind of activity. For each of these a fee is charged.

Revenue from these Activities.—Theoretically, the charges should exactly offset the cost of the services rendered. As a rule, however, they are greater or less than the costs, with the result that the government either makes a profit or sustains a loss from the activities under consideration. Very often, however, what might appear to be a loss may represent that portion of the

costs which is to be taken care of through taxation of one kind or another, on the ground that the people as a whole derive benefits from those services for which they should pay.

It is interesting to note the case of public charities. Of course, the persons who are helped directly usually are unable to pay, but the fact that the city helps them often relieves their relatives from a responsibility which rightly belongs to them. The city should, therefore, make these people pay for the support of their dependent relatives in so far as they are able.

Services and Taxation.—In the days of despotism taxes were generally paid very grudgingly. But as governments come to be regarded more and more as business undertakings, and as people realize that the money they contribute is spent by the people they elect, taxes are being paid less unwillingly and are being considered more of an investment, even if a compulsory one. Moreover, it can truthfully be said that the citizens get more for the money which they pay in taxes than for any other ordinary expenditure which they make.

Indirect Services of Government.—Another reason why some people object to paying taxes levied against them is that they think they are paying money into the public treasury from which others rather than themselves reap the benefit. But frequently these persons do not see clearly all the return they are securing for their money. For instance, should the man who has no children, or who sends his own to private schools, help to support the public schools? It is true he receives no direct benefit, but he does receive many indirect ones.

His employees are made more valuable for having had the education which the public gives. He has to pay for fewer policemen to guard his property than if he lived in a community where people were not taught to be law-abiding and to have respect for the rights of others. The life of the community is on a much higher plane than if the majority of the people were illiterate. So we see that many things which the government does are like pebbles dropped into a quiet pool. The waves reach out in ever widening circles, and just as it is difficult to distinguish one circle from another, so it is hard to separate those who have received benefits from those who have not.

Taxation in Philadelphia.—In 1917 Philadelphia levied for school purposes a tax of fifty cents on each hundred dollars of assessed valuation of taxable real estate and horses and cattle. For city and county purposes a tax of \$1.25 on each hundred dollars of assessed valuation was levied on horses and cattle, and on real estate located in those parts of the city which have the benefit of all of the principal city services; two-thirds that rate on real estate located in the "suburban" districts; one-half that rate on real estate in the "farm" districts—except that the rates applicable to property in certain sections of the city that take care of their own poor by separate "poor taxes" were slightly lower. In addition to the above, certain "money at interest" and carriages to hire were taxed for city and county purposes at the rate of forty cents on each hundred dollars. This forty cent tax is known as the "personal property tax." The taxation of 1917 yielded the following approximate amounts of revenue or income:

	For City and County Purposes.	For School Purposes.	Total.
Real estate.....	\$21,249,050	\$8,717,800	\$29,966,850
Horses and cattle.....	22,650	9,150	31,800
Money at interest.....	2,800,050	2,800,050
Carriages to hire.....	200	200
Total.....	\$24,071,950	\$8,726,950	\$32,798,900

Real Estate Taxation.—Of the many kinds of taxation for local purposes, taxes on real estate are the most common. The principal reasons for this may be said to be:

(1) The owners and the users of real estate receive a very large percentage of the indirectly financed benefits of government; (2) all citizens use real estate more or less directly; (3) all citizens use products and services that are produced by users of real estate; (4) to the extent that the taxes levied on a particular piece of real estate exceed the owner's share of the taxes to be collected, the taxes can be shifted to others in the form of rent, board, or increased charges for products or services; (5) owners cannot conceal their real estate or move it away; (6) if the taxes are not paid within a specified time the real estate can be sold by the government and the unpaid taxes collected out of the selling price; (7) taxes on real estate are, as a rule, the simplest and the least expensive to collect of all the various kinds of taxes.

Assessment of Real Estate for Taxation.—One of the important things to be looked into in any system of real estate taxation is the assessment of the property upon which the tax is to be paid, that is, the placing of a value upon it for taxation purposes. In Philadelphia

this work is done by the Board of Revision of Taxes, which consists of three members who are appointed by the Board of Judges of the Courts of Common Pleas. The Board of Revision appoints seventy assessors to do the actual work of assessment.

Revenue from Other Sources.—In addition to the \$32,798,900 revenue which the city derived in 1917 from the several forms of taxation mentioned above, it obtained about \$15,000,000 from other sources. Of this latter sum, \$5,508,000 was for water service, \$2,160,000 from the gas works, \$1,902,000 from liquor licenses, \$908,000 from the state for school purposes, and the remainder from interest on city deposits, fees, permits, various kinds of licenses, and miscellaneous sources.

It is interesting to note that of the \$5,508,000 for water service, about \$1,300,000 is clear profit to the city, and all of the \$2,160,000 received from the gas works is also clear profit to the city. Thus it is seen how publicly owned business enterprises can help to support the rest of the government and so keep down general taxation.

Special Assessments.—Special assessments are charges which a city or other government makes against those whose property has been increased in value as a result of improvements or other work undertaken by the government. All of us realize that whenever Philadelphia opens, grades, or paves a street, paves a sidewalk, lays water pipe, builds a sewer, lays out a park, or does any one of a number of other similar things, the property in the immediate vicinity of the improvement increases in value because of that improvement.

It is, therefore, a common and a proper practice of governments to collect from the owners of the benefited

properties as much of the increase in value of their properties as may be equivalent to all or a portion of the cost of the work that has produced the increase in value. In this way governments are enabled to make many improvements that would not be possible if their cost had to be met out of general taxation.

We in Philadelphia have not adopted any definite or satisfactory policy for levying special assessments. Individual property owners are charged with the cost of the first or "permanent" paving of that portion of the streets in front of their properties, and are responsible for the grading, paving, repairing, and repaving of the sidewalks adjoining their properties. In addition, property owners are assessed so much per foot of frontage for sewers and for water mains laid in front of their properties. The city, however, pays the entire cost for squares, parks, boulevards, repair of streets, and various other improvements.

It is apparent that special assessments are but a form of taxation in which the tax, or amount to be collected, is levied against those who benefit most from the particular governmental activities for which the special assessments are made. The more the people recognize the justice of special assessments and the increased opportunities they afford for undertaking desired improvements, the more they are being resorted to by governments.

Excess Condemnation.—Closely related to special assessments—in fact, in many ways, a sort of extension of special assessments—is what is known as "excess condemnation." When a government wants a piece of property it usually endeavors to buy it, just as private individuals do; but where the owner declines to sell,

or asks a higher price than the government thinks it should pay, the government "condemns" the desired property. In other words, the government takes the property by legal process and later pays the price, or "damages," which some board or jury determines to be fair. Now, excess condemnation is but the condemning, or "legal taking," of more property than is actually needed for the improvement that the government plans to undertake.

This excess land is taken by the government in order to accomplish several highly commendable purposes. By taking this land at its fair value before the improvement is undertaken, and selling it at its greatly increased value after the improvement has been completed, the government is enabled to get back a large share—very often all—of the cost of the improvement, thus accomplishing what special assessments accomplish in another manner. A number of cases are on record where the government obtained for the excess land a greater amount than it paid for both the excess land and the entire improvement, thus reaping a profit for the benefit of all the citizens.

By taking this land and replotting it, the government is able to convert shallow, narrow, and irregular lots into lots that are well adapted to use in harmony with the improvement. This means a much quicker and a much more satisfactory adaptation of surrounding property to the improvement, and it also is a factor in increasing the value of the excess land.

It is thus seen how excess condemnation is both a financial measure and an efficient means of developing a city plan and making a city beautiful.

Unfortunately, Philadelphia is deprived of the right of excess condemnation and also of the right to assess benefits for projects like its Parkway. As a result, a mere handful of the people have gained millions of dollars at the expense of the citizens as a whole. If Philadelphia were permitted to exercise these two rights it would find itself in a vastly better financial condition than otherwise is possible.

Appropriations.—Appropriations is the name given to the practice of setting aside, either in actual cash or merely on the books, certain sums of money to be used for specified purposes. Usually an appropriation authorizes some person or group to spend the money and may also specify the person or group to whom the money is to be paid.

In Philadelphia all appropriations for the city and county are made by Councils. This is in conformity with the usual rule that the legislative branch of a government makes the appropriations. For the school system of Philadelphia taxes are levied and appropriations are made by the Board of Public Education, which as we have seen (Chapter VIII) is the governing body for the School District of Philadelphia. The School District covers the same area as the city, but is really a government independent of the city government.

Theoretically, Councils are supposed to provide for all the needs of an ensuing year in the annual appropriations above referred to. As a matter of fact, however, the annual appropriations are amended in various ways throughout the year for which they were made.

The Budget.—One of the most useful tools that has been devised to keep the proper control of finances is

the "budget." It consists of the estimates and the financial plans which the executive officer draws up and presents to the legislative body which votes the money to carry on the government. The plans for spending money very largely constitute the service program of an administration for the coming period—usually a year or series of years—so that when the estimates are printed and examined, people are in a position to investigate and to criticize. The word "budget" comes from the old French word "bougette," which means a small purse or bag, and has now come to mean the collection of financial plans presented at one time.

In Philadelphia two budgets are prepared each year by the various departments, one on forms furnished by the City Controller, the other on forms furnished by the Finance Committee of Councils. Under the law, the City Controller is supposed to have charge of this matter; but the Finance Committee members have felt that the Controller's budgets have not furnished the information in a suitable form, so they have prepared their own forms. This procedure on the part of the Finance Committee is not illegal but extra-legal, that is, it is beyond what the law requires.

Fixing the Tax Rate.—After the Finance Committee has decided what appropriations it will recommend, it figures out how much money it will require to meet all the needs. The committee has before it the City Controller's "legal estimate of receipts," which gives practically the average of the preceding five years' receipts from all the various sources. By finding the total of all the needs, and deducting from it the total of the legal estimate of receipts other than from the tax on

real estate, it is easy to ascertain how much remains to be raised by that tax. Dividing the total assessed valuation of real estate by this figure gives the rate necessary to produce sufficient revenue.

"Budget Time."—All the foregoing budget procedure takes place in the latter part of the year. The estimates are usually prepared during the late summer and fall, and November is the busiest period for considering the estimates. Under the law the tax rate must be fixed on or before December 1st, so it is pretty well determined by that time what will be recommended by the Finance Committee. Councils ratify, with occasional minor changes, the appropriation ordinances as prepared by the Finance Committee, and then they are submitted to the Mayor for approval.

Financing "Capital Outlays."—Requests for authority to spend money for permanent improvements, acquisition of land, buildings, etc., known as "capital outlays," are usually considered separately from the annual budget; for this budget ordinarily covers the current expenses, such as salaries, supplies, street cleaning, removal of garbage and ashes, telephone service, and interest on the city's debt. These permanent improvements have almost invariably been financed in recent years out of loan funds—that is, borrowed money—and not out of the taxes and other revenues of the city.

Financial Officers.—The function of the Receiver of Taxes is to accept the money which is paid in to the city and turn it over to the City Treasurer. The latter is the custodian of the city's funds. Both have large forces of clerks engaged in receiving the money and in the recording of these transactions. It is not clear why two

offices should exist for the handling of the money. The really important financial officer is the City Controller, who is given great powers by law. All warrants for city payments for salaries, supplies, etc., must be countersigned by him. This duty gives him tremendous power in the city's financial operations, for he can refuse his signature if he has doubt of the correctness of any item.

Need for Careful Records and Bookkeeping.—As municipal finances are so complex, very careful records and bookkeeping are required to find out how much various services and improvements cost, how much the city owes to its hundreds of creditors and its thousands of employees, how much is owed to it by its thousands of debtors, how much will be needed in the future for various purposes, and to obtain many other kinds of information necessary to run the city's business intelligently and to let the people know how their money is being spent. This phase of finance is known as accounting.

How the City's Financial Position can be Determined.

—As the years go by, the city collects enormous sums of money which it pays out, as we have seen, for wages, materials, etc.; it erects buildings and other structures, it buys land, it contracts debts, it enters into all kinds of financial transactions. One set of officers takes over affairs from another set, manages them for a little while, and then in turn transfers the business to still another set. In all this confusion it has appeared to be very hard to determine just how matters stood—whether the city was better or worse off financially at the end of an administration than it was at the beginning. However, there is a definite method of accounting by which this matter may be exactly determined. It is merely neces-

sary to keep proper records and accounts, and to prepare at regular intervals a statement of the assets and the liabilities of the city. The excess of the city's assets over the city's liabilities is known as the city's "net worth" or "net assets." Now if at the end of a year the city's net worth is larger than it was at the beginning of the year, the city has gained ground financially—in other words, has increased its net inheritance—to the extent of the difference between the two net worths. But if at the end of a year the net worth is smaller than it was at the beginning of the year, the city has lost ground financially—in other words, has decreased its net inheritance—to the extent of the difference between the two net worths. It is thus apparent that a city's financial progress or regress is ascertained in exactly the same manner as is that of an individual, or partnership, or private corporation.

Conclusion.—As the city becomes larger and more complicated, economy in its affairs becomes more necessary and at the same time more difficult. As in all other departments, education of the public is the greatest safeguard. The holding of open sessions of the Finance Committee of Councils is a very good measure. The publication of the city's accounts in as simple a form as possible, for the public to study, would help to educate the people. We all need to know more and to think more about public finance in order to vote wisely on questions of loans, to elect intelligent and conscientious financiers to care for the city's money, and to have proper interest in all the city's property of which we are joint owners.

CHAPTER XVII

CIVIL SERVICE

Honest Service Needed.—We have already seen that the city government does a great many things for the members of the community and that it is important to have these things done well. How are we to get men and women of the kind we need to do all of these different kinds of work for us? When we think that altogether there are about twenty thousand persons in the service of the city government we must realize at once that not all of them can be chosen by election. There would be so many candidates that we could not know enough about each one to vote for the best person in every case. Hence we prefer to choose only a few of the men holding the more important offices and then let them see to it that the city's work is well done. In other words, we elect the Mayor, members of Councils, and a number of other officials and give them the power to appoint the rest of the city's workers. For convenience, we may refer to the persons who are elected to office as "elective officials" and to those who are appointed to office as "appointive officials."

The Short Ballot.—Our experiments in self-government are convincing many people that it is better to have fewer men elected and more appointed. There is no doubt that our ballot in a great many cities and states is still too long for the ordinary voter to know something about each of the candidates and to vote for the men best

fitted for public office. If the ballot were shortened and the voter had to elect men for the important offices only, he would be able to choose much more intelligently. This idea is gaining acceptance very rapidly among political thinkers and is being gradually adopted by cities throughout the country. Popularly it is known as the "short ballot" idea.

The Spoils System.—The danger of placing large powers of appointment in the hands of a few men is that they will fill offices with their political friends. All of these employees will in turn influence their friends to vote with them, and the result will be a great organization which cares only to profit by holding and controlling public office. Elections then may become mere contests for place, power, and profit rather than expressions of belief as to public questions. In other words, the parties become mere rivals for spoils. As soon as a new administration comes into power it immediately removes the city employees who are members of the rival party and puts its own friends into office. City jobs are looked upon as spoils of political warfare which the victorious party has a right to distribute among its faithful followers. This general practice has become known as the "spoils system" of public employment.

Philadelphia's First Civil Service Law.—The first step away from the spoils system in Philadelphia was taken in 1887, when the civil service section of the Bullitt Bill went into effect. This section provided for open competitive examinations to determine the fitness of applicants for appointive positions in all departments under the city government. The enforcement of this section was entrusted to a board composed of the Mayor

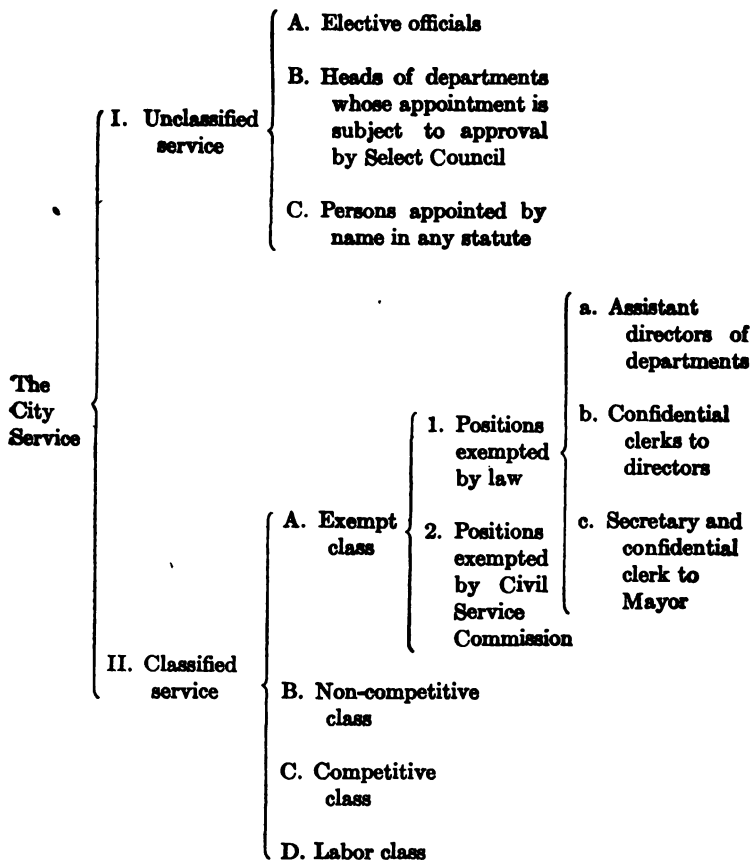
and the heads of departments, known as the "Municipal Executive Board of the City of Philadelphia." Unfortunately, under this arrangement the power to make and enforce rules for selection and promotion was given to the same men who were obliged to obey the rules. The result was that employment conditions in the city service were not very much better than they had been under the spoils system.

The year 1906 marks the beginning of the present system of public employment in Philadelphia. In that year the State Legislature of Pennsylvania passed an entirely new law governing our local municipal service. This law provides for a civil service commission of three members, none of whom may hold any other public office. All commissioners hold office for overlapping terms of five years,—for example, 1919-1924, 1921-1926, 1922-1927, 1924-1929, etc. In case a commissioner dies or resigns before the expiration of his term, the Mayor may appoint a successor for the unexpired term. Under the law the Mayor is supposed to remove a commissioner only for good cause, to be stated in writing. This restriction, however, is not binding on the Mayor; for under the constitution of the state of Pennsylvania he may remove a commissioner whenever he pleases without even stating the cause. It often happens that when a new mayor takes office he either requests all the Civil Service Commissioners to resign or removes them by means of his constitutional power, and then appoints men of his own choice. This, of course, is unfortunate, for if the civil service law is to be administered impartially the commission itself should not be at the mercy of political fortunes.

General Duties of the Commission.—It is the duty of the Civil Service Commission to look after the employment needs and problems of the city government. It has to do everything that is usually done by the ordinary employment department of a private business or factory, and needs to be much more exacting in its methods. As a rule, a private employment department is concerned only with getting and maintaining a highly efficient group of employees and may use any available means to secure this end. A civil service commission, however, must use methods that not only make for efficiency but also are in harmony with our ideals of democracy and justice. It must see that all persons seeking or engaged in public employment are treated alike on their merits and are dealt with fairly at all times. In order to make sure that this is done the civil service law prescribes the broad outlines of the methods to be used, while the details are left to the commission to work out in its own way subject to the Mayor's approval.

Classification of the Service.—One of the important things outlined in the law is the classification of the city service. The purpose of this classification is to guide the Civil Service Commission in its methods of selecting workers for different kinds of positions. In its broad outlines, the classification is as shown on the following page.

The Unclassified Service.—The reader will notice in this outline that the entire city service is divided into the unclassified service and the classified service. The unclassified service includes all elective officials, such as the Mayor, members of Councils, and the City Solicitor. It also includes appointive officials whose appointment



is subject to approval by Select Council, as, for example, the Director of Public Works, the Director of Public Safety, the Director of Health and Charities, and the Director of City Transit. The important thing to remember about all the officials in the unclassified service is that they do not come within the jurisdiction of the

Civil Service Commission. Both the elective and the appointive officials included in this division of the service have to decide upon matters of public policy and, therefore, must be chosen by political rather than by civil service methods.

The Classified Service: *The Exempt Class.*—The classified service consists of four distinct classes, namely, the exempt, the non-competitive, the competitive, and the labor class. Of these four classes, all except the exempt class come distinctly under the Civil Service Commission. The offices and positions in the exempt class, however, are as clearly outside the scope of civil service as the unclassified service. Part of the positions in this class are specified in the law and cannot be otherwise classified by the Civil Service Commission. This is true of all the assistant directors of departments, the confidential clerks to the directors of departments, and the secretary and confidential clerk to the Mayor. The other positions in this class are positions which the Civil Service Commission thinks it cannot fill by means of civil service examination. During recent years, however, it has been shown by the more progressive civil service commissions throughout the country that even the very highest paid technical and expert positions can be filled successfully by means of open competitive examinations.

The Non-Competitive Class.—Positions in the non-competitive class are filled by examination, but these examinations are not open and competitive. Only the person who is being considered for the position is given a test, and if he obtains a passing grade he may be appointed. Since this method of appointment leaves the

way open to favoritism and unfairness, the more progressive civil service commissions very rarely place a position in the non-competitive class.

The Competitive Class.—The great majority of offices and positions outside the labor class are included in the competitive class. Practically all bookkeepers, stenographers, clerks, engineers, doctors, inspectors, policemen, firemen, and skilled workers of all kinds belong in this class. All of these employees are chosen by means of open competitive examination, and this test makes up the principal work of the Civil Service Commission.

The Labor Class.—The labor class includes all unskilled laborers in the city service. Under the provisions of the law the Civil Service Commission may adopt any practicable means of selecting laborers, but ordinarily only an examination showing them to be physically fit for the work is given to applicants for labor positions.

The Physical Examination.—We have already mentioned the physical examination which is given to all labor applicants. It is given also to applicants for all other positions, especially to those who want to become policemen or firemen. The purpose of the examination is to find out whether the applicant is in good general health, whether he has physical defects that would interfere with his work, and whether he is strong enough to do the particular kind of work for which he is applying. Policemen and firemen have to meet all of these requirements and in addition have to qualify in height and weight.

The Mental Examination.—Practically all applicants for positions in the competitive class must pass a mental examination. This examination usually consists of a

written test very much like an examination in school. Each applicant is handed a list of questions, which he answers in writing as best he can, and then his answers are marked and graded by the examiners of the Civil Service Commission. The questions asked pertain to the work of the position for which the examination is held and also to the general information of the applicant.

For the more important offices, the questions in the mental test may relate to broad problems of administration and call for a fairly long discussion. For example, in the examination for the position of assistant chief, division of housing and sanitation, bureau of health, department of public health and charities, \$1,900 a year, held on March 3, 1916, applicants were asked, among others, the following practical questions:

1. Prepare a blank form for a nuisance inspector's report.
2. In what form would you record the results of nuisance inspection so as to give a comprehensive view of the work accomplished?
3. The chief of the division is away on sick leave. A tenement is reported in which two rooms, each about 10 feet by 15 feet, are occupied by a man and wife, four children, and six boarders. What action would you take?
4. Upon what grounds would you refuse a permit to keep a horse in the yard of a tenement house?
5. A basement water closet has been ordered removed from a dwelling owing to the backing up of the sewage. The owner writes a letter of protest saying that she is a widow of small means and cannot afford to make the change ordered. She promises to attend to the objectionable conditions as they may occur, so that they will not endanger the health of the tenants. Frame your letter in reply.

Training and Experience.—Another test which all applicants for positions in the competitive class must undergo is an examination of training and experience. Each applicant must state in writing what schools and colleges he has attended, what special studies he has pursued, and what practical experience he has had. These statements help the examiners to judge whether the applicant is fitted for the position to be filled.

The Oral Interview.—The oral interview is still another method of testing the fitness of applicants for a considerable number of positions. It is used principally in examining applicants for duties that require the exercise of a great deal of judgment, tact, and personality. Inspectors, for example, as well as heads of divisions and chief clerks, frequently are given an oral interview as part of their examination. For lower grade positions this interview is a very simple affair. The applicant appears before one or more of the examiners, who ask him a number of simple questions regarding his education and the work he has done and observe his general appearance and manner of replying. For high grade and expert positions very often this interview is conducted by a board of men who themselves are experts in the kind of work for which the examination is held. For example, when the Chief Examiner of our Civil Service Commission was chosen in 1915, a number of noted civil service experts from different parts of the country were asked to come to Philadelphia and assist in interviewing the applicants.

The Practical Test.—In recent years the practical test has been used a good deal, especially in selecting men for skilled labor positions. In a test of this kind applicants are required to show their ability by actually doing a

piece of work which only a properly skilled workman can perform. Painters, for example, are asked to do an actual job of painting; blacksmiths, to do actual blacksmithing; and machinists, to do work requiring skill as a machinist.

Investigation of Character.—Investigation of character is another means recently introduced of determining the fitness of applicants for city positions. This consists of



A PRACTICAL EXAMINATION

These men are being tested for their ability to construct pavements.

inquiring closely into the past record of the applicant to see whether he has been guilty of any crimes or other acts that would make his employment by the city unwise. Investigation of this kind is especially important in selecting policemen and firemen.

Use of Various Tests.—Not all of these tests, however, are used in every examination. In each examination the commission uses only those tests that seem best adapted for selecting men for the particular kind of work to be

done. Cooks, for example, might be given a practical test and their experience might be looked into, but they would not be asked to write a thesis nor to appear before an oral examining board. Applicants for high administrative and technical positions, on the other hand, would not be given a practical test, but might be asked to prepare a thesis and also to submit for examination articles and books that they had written. So in every other case the Civil Service Commission would use the kind of tests that would best enable it to find out whether applicants are able to do the work for which they are applying.

The Unassembled Examination.—Of late years the so-called “unassembled” examination has been used to a considerable extent in filling high grade administrative and expert positions. In an unassembled examination the applicants do not meet in a single room to write their papers, but may be asked to prepare in their own home or office a discussion of some practical problem of administration and a statement of their training and experience and of the constructive work they have accomplished. These written discussions and statements are then sent to the Civil Service Commission by mail. The commission may also examine any books or articles published by the applicants, and take into consideration the reputation and professional standing of the various competitors.

The great advantage of the unassembled examination is that the best men all over the country may compete in it without serious inconvenience to themselves, and thus any city may obtain by an impartial method of selection the most expert persons regardless of their loca-

tion. This kind of examination has been used quite frequently in Philadelphia, and with excellent results.

Eligible Ratings.—After applicants have been examined they are given ratings by the examiners of the Civil Service Commission. A separate rating is given for each test, and the different parts of each test are also rated separately. Then the separate ratings are averaged and the resulting average rating determines the applicant's standing. If this rating is as high as seventy per cent the applicant's name is placed on a list of eligibles in the order of his standing, the person with the highest rating being placed at the head of the list. Those who fail to get a rating as high as seventy per cent are not considered qualified for the position and are not placed on the eligible list.

Method of Appointment.—Once an applicant gets his name on the eligible list he is in line for appointment to a position for which the list is appropriate, but that does not mean that he is sure to be appointed. In the first place, if he stands very low on the list his name may not be reached before the end of the period during which the list is in force. This period may not be less than one year nor more than three years, the exact length being determined for each list. In the second place, when a vacancy occurs in any department of the city government the head of the department may appoint any one of four persons whose names are submitted to him from the top of the list. While those who are passed over by one department head may be appointed by another department head, there is still a possibility of being passed over entirely, for no name can be submitted to the same appointing officer more than four times. In this connection, it should be noted that in

most cities only three names are certified for a single vacancy, and in Chicago only one name is submitted, so that no eligible can be passed over entirely. In the third place, even after an eligible has secured appointment he is not sure of being retained until the end of a three months' period of probation, when he either receives the position or loses it altogether. The purpose of the period of probation is to give the department head a chance to observe the work and conduct of the new employee and thus get a better idea of his fitness.

The work of the Civil Service Commission, however, does not consist entirely of examining applicants for original appointments. It also has important duties to perform with reference to employment problems that arise after employees have been brought into the city service.

Promotion.—One of these internal problems of employment is that of promotion. Every person who enters the city service hopes some day to rise to a better position. In order that promotion may be according to merit, just the same as the original appointment, the Civil Service Commission requires applicants for higher positions to demonstrate their fitness in a competitive promotion examination. Many civil service commissions require that promotions shall be made in the order of the ratings of the successful candidates, but the present rules of the Philadelphia commission permit department heads to choose any one from the promotion eligible list regardless of his relative standing.

Inequality of Salaries.—A very serious difficulty in making promotions fair is the inequality of salaries for like positions. The same kind of work may pay \$1,000 in one position and \$1,800 in another. Under the present civil

service classification, however, the grade of a position is determined by the salary attached to it no matter what may be the duties involved. The result is that positions that ought to be in the same grade are often in different grades, and it is impossible to adapt a promotion examination both to the actual duties of the position and also to its legal grade. Philadelphia suffers from this condition as much as any other city.

Standardization of Salaries and Employments.—In order to correct this condition a movement has been started to standardize municipal employment, including salaries. The aim is to secure uniform treatment of employees doing the same kind of work, and an important feature of this is to equalize salaries for like positions. A number of cities, among them Chicago, have adopted the idea of standardizing their employments, and many other cities and states are now working toward a standardization of this kind. At present the city of Philadelphia is considering the adoption of a similar measure. As a matter of fairness to the persons who are doing the city's work, such a measure ought to be adopted as early as possible.

Removals.—Another problem of employment arising within the service is that of providing security against unjust removal. This problem is difficult and its solution has not yet been worked out. In Philadelphia no employee under the protection of civil service may be removed for political or religious causes, and when he is removed the head of the department must state his reasons for the removal in writing and submit it to the Civil Service Commission. The accused employee may make a written reply to this statement, but has practically no chance of being reinstated unless his department head voluntarily takes

him back into the service. Policemen and firemen, however, cannot be removed unless they have been tried and found guilty by a court of trial composed of officials in their own department.

Importance of Good Commission.—It cannot be said that the manner in which the city of Philadelphia deals with the problems of employment is anywhere near perfect; but the civil service just outlined, if properly administered, does insure a considerable degree of fairness in appointment and promotion, and also helps to make the city service much more efficient than it was before the present civil service law went into effect. A great deal, of course, will always depend upon the manner in which the system is carried out. The civil service law can only direct what is to be done, and a better law than the present one might not give us better results if administered by an unsatisfactory commission. It is very important, therefore, to get the right kind of men to act as civil service commissioners. If the Civil Service Commission is composed of men who are in hearty sympathy with the spirit of the civil service law, and who take an active interest in improving employment conditions in the city service, the results will soon be obvious in every department of the city government. There will be a more efficient, a more intelligent, and a better satisfied corps of employees in the city's service. The public business will be attended to more promptly and in a more orderly manner. Our hospitals will be safer places for the sick; our food will be more wholesome; the streets of our city will be cleaner and more attractive; our houses will be more secure from pillage and fire, and Philadelphia will be a better and more beautiful city in which to live.

CHAPTER XVIII

PARTIES AND ELECTIONS

Some Definitions.—If this country of ours were an autocracy or despotism, a few people would do all the governing and all the rest would have to obey whether they wanted to or not. Those who gave the commands would be the rulers, and those who obeyed would be subjects. Fortunately the United States is a democracy, where the people govern themselves through officials whom they choose to carry out their will. In a democracy the mass of people are citizens, not subjects, and those who do the governing are responsible government officials, and not rulers.

In a democracy the people have the right to select their governing officials, and hence elections must be held frequently and regularly. Anyone whose name appears on the ballot to be voted for at any election is called a candidate, while the whole group of candidates of one party is usually known as a ticket. Back of each candidate there is usually an organized group of citizens known as a political party. This party is made up of those who agree in most matters as to how the government—of town, county, state, or nation—is to be run. Each of these parties, in turn, has its own officers, selected by those who vote that party ticket.

Qualifications for Voting.—The purpose of voting is to express the will of the people about governmental policies and the officials who shall execute them. This is of such

fundamental importance in a democracy that all necessary steps must be taken to safeguard the ballot. In a small town "everybody knows everybody else," and but few precautions need be taken. In a big city, especially in sections where the population is a shifting one, personal acquaintance is extremely limited; and the honest voters, who are the great majority, must be protected against dishonest practices. The election law of Pennsylvania, as it applies to Philadelphia, is perhaps unnecessarily complicated through the effort to set up these safeguards. To have the privilege of voting in Pennsylvania one must be a male citizen of the United States, at least twenty-one years old, and must have paid a state or county or poll tax if over twenty-two years of age. In addition, one must have lived in the state a year—unless a former resident of the state, in which case it is six months—and in the voting precinct two months. The last requirement is for the purpose of preventing what is known as the "colonizing" of voters, namely, the bringing of outsiders into a voting district at the last moment in order to carry an election unfairly.

Another dishonest practice connected with elections is known as "repeating," by which is meant the going about from one polling place to another and casting a vote under a false name at each place. In order to put a stop to "repeating," and also to help prevent "colonizing," the law compels each voter to appear in person before the registrars of his election district and there register his name, occupation, residence, place of birth, and even a brief personal description. To this he affixes his signature, which serves as an additional means of identification in case his right to vote should be challenged when he appears at the polls.

But the end is not yet: he must also enroll. Under the old law the voter at the primaries asked for any party ballot he wanted, and voted it. In case he was challenged by a watcher he had to swear or affirm that he expected to vote for a majority of that party's candidates at the next election. Taking advantage of this law, the leaders of the majority party would sometimes arrange that in each voting precinct enough of their voters should ask for the other party's ballot to secure the nomination of the weakest candidates on the minority party's ticket. Their own candidates would thus have an easy time of it at the ensuing election.

This trick, known as "swamping" the opponents' ticket, has been rendered more difficult by requiring that if a man would vote at a primary election—except for judges, who are on a non-partisan ticket—he must go before the registrars of his election district and be enrolled with some political party. When he enters the polling place he can secure only that party ballot, and hence cannot vote any other ticket.

As an additional precaution, the law provides that the voter shall always enroll with that political party a majority of whose candidates he voted for at the last general election. In practice, men frequently do not do this, but change their enrollment; for the only risk in so doing is that of having their vote challenged, in which case they will either have to decline to vote at all or else swear falsely as to how they voted at the last election. Many people are coming to believe that any test of party membership which encourages falsehood is not a good one and should be changed.

The Primary Election.—In Pennsylvania, as in most of

the other states, two elections are held each year. The first one is called the primary election, or simply "the primary," from the Latin word *primus*, meaning first. At this election each party selects its candidates who are to be voted for at the general election in November.

It has been found that state and national elections have had an undue influence on city and county elections, because people let their interest in national and state matters influence their voting in local affairs. For instance, men have often voted for a Republican candidate for mayor of Philadelphia, regardless of his fitness for the place, thinking that thereby they were helping the cause of a protective tariff. Accordingly, the state and national elections are now held in the even-numbered years, while city and county elections occur in the odd-numbered years. The primaries for the state and national elections are held on the third Tuesday of May, while those for city and county elections fall on the third Tuesday of September.

In order that the voter may easily reach the polling place—"the polls"—where he is to vote, the city is divided up into voting precincts, each containing a few hundred voters and each having a centrally located polling place.

Now let us see how an election is actually conducted. We will begin with a primary election. When the voter goes to the polls, which are open from seven in the morning to seven in the evening, he enters a room, at one side of which is a table. Behind this table sit the election officials, five in number: a judge, two inspectors, and two clerks. Before entering the room the voter has probably read over one of the bright-colored sample ballots which usually hang near the entrance, so as to know in advance what

candidates he wants to vote for. As he passes by the table he gives his name and address, whereupon an election official detaches a white ballot from its stub, folds it in a certain manner, and hands it to him. This ballot can only be of that party with which he is already enrolled. When judges are to be voted for, an additional non-partisan ballot containing their names is also handed him.

Before going into the voting booth with our voter, suppose we stop to discover how all the names he will find on his ballots ever arrived there. In Pennsylvania, and in many other states as well, there is what is known as nomination by petition. In brief, this means that any citizen having the legal qualifications for an office may get his name on a ballot sheet, provided enough of his friends and supporters who are qualified electors will sign a nomination petition, asking that his name be placed on the ballot as a candidate. The number of signatures needed depends on the importance of the office, and varies all the way from five to a thousand. In case the office is a state or national one the nomination petition must be filed at Harrisburg, with the Secretary of State. If it is a local one the petition is filed with the County Commissioners—the same group of three men who arrange for the printing of the ballots and furnish all the equipment of the polling places.

But we must not forget our voter, who is patiently waiting for us to accompany him into the voting booth. This is a little box of a place, curtained off from the main room and furnished with a writing shelf, over which is suspended a lead pencil attached to a string. Our voter unfolds his unwieldy "blanket" ballot and tries his best to find the names of the men he wants to vote for. This

list is often too long for him to remember unless he either has a list with him or has marked a sample ballot in advance and brought that in. So difficult has it become to mark these long ballots correctly, and to decide intelligently between the various candidates, that many people are asking for a shorter ballot. For example, at the general election in 1915, the official ballot measured 45 by 25 inches, called for the selection of 38 officials from a list of 157 candidates. In addition the voter was asked to pass upon four amendments to the state constitution. What they want is that only the most important offices shall be filled by popular election, and that the officials thus chosen by the voters shall appoint to the less important offices. These appointments and all promotions are to be in accordance with a set of rules and regulations known as "Civil Service." (See Chapter XVII.)

Almost everyone in Philadelphia has seen a sample ballot, and knows that the names of candidates are arranged under the titles of the offices they are seeking, and that opposite each name is a square where the voter may place a cross [X]. Having marked his ballot, our voter refolds it as directed and slips it into the ballot box, which stands on the table where the election officials can guard it.

The Uniform Primaries Act says distinctly that no voter "shall be permitted to receive any assistance in marking his ballot, unless he shall first make an affidavit [a sworn statement] that he cannot read the names on the ballot, or that by reason of physical disability he is unable to mark his ballot." Unfortunately, voters can often be bribed or threatened into asking for assistance when they are not entitled to it. Thus they admit into the booth with themselves men who are acting as spies to see that

the votes are cast for certain candidates favored by the leaders. This "voters' assistance" provision of law has come to be regarded as doing more harm than good, and should either be amended or repealed.

Another clause of the Primaries Act rightly provides that no ballot shall be rejected for any error in marking which "does not render it impossible to determine the voter's choice." The law also allows a voter to return a ballot he has unintentionally spoiled in marking and get another one in its place.

Our voter's right to cast his ballot may have been challenged before he entered the booth, in which case he was obliged to "swear in" his vote. This he did by swearing or affirming that he was the man he claimed to be and that he was entitled to vote in that election district. Of course, should it afterward be discovered that he had sworn (or affirmed) falsely he would be liable to punishment for perjury, that is, swearing to a lie.

It may be interesting to know that several people are "keeping tab" on those who vote. When our voter was handed his ballot one of the election officers put a mark opposite his name in a "ballot check list," and when the ballot was placed in the ballot box another official made a similar mark in a "voting check list." Besides this, several men known as "watchers"—who were standing about the room with small books in their hands containing lists of the voters of that precinct—checked off our voter's name as having cast his ballot. The reason for this last performance becomes plain along late in the afternoon, especially if a keen contest is on between rival candidates, when automobiles are sent out for careless or indifferent voters who have not yet appeared at the polls. It ought

to be felt a disgrace by any well man to have to be reminded of his right and his duty to vote at the primary election or at the general election in November.

As soon as the polls are closed the counting of the vote begins. The ballots are opened and the results read aloud by one of the officials, while the votes for the various candidates are checked up on a ruled tally sheet by another official. Whenever a ballot is found that is not marked according to the directions on the ballot itself, the judge of elections must decide how much of the ballot is plain and can be counted. A fair judge will obey the law and admit all of a ballot he possibly can. An unfair one will throw the ballot out altogether, or make a ruling that will favor his own side. Most judges are honest; and when they are not they are often afraid of protests from the watchers, who are keeping a sharp eye on everything that happens.

When the votes have all been counted for each candidate the results are sent to the County Commissioners, along with the stubs and the unused ballots. The commissioners at once make a recount from the tally sheets to see that no mistakes have been made. They may even reopen the ballot box of some voting precinct, but only when ordered by the Court of Common Pleas. And the court will not give such an order unless it has been petitioned to do so by some of the voters of that district, who believe that "fraud or error" has been committed by the election officers.

The Campaign.—The candidates of the various parties having been selected at the primaries, the parties prepare themselves for the test of strength that will come at the election. This preparation is known as the "campaign,"

and is conducted mainly through personal solicitation, speeches, newspaper articles, and pamphlet literature mailed directly to the voters.

Sometimes the campaign is a quiet one, and but little interest is aroused. But usually, whether in municipal or in state and national elections, the interest is keen and every effort is put forth to win votes. Not all of these efforts are honest or legal, for bribery and intimidation have often occurred in city elections. "Bribery" and "intimidation" are big words, but even our young citizens cannot learn their meaning too early or the menace they offer to democracy in our large cities.

The General Election.—Coming now to the general election, we discover that the same election officials are serving here that were acting at the primary election, and that the procedure is about the same. As we have already seen, an elector is not supposed to change his mind between a general election and the following primary, but must enroll and vote with the same party. But he is perfectly free to change his mind between a primary and the succeeding general election, and may vote for different candidates from the ones he helped put in nomination at the primaries. You will notice that this gives us a secret ballot at the general election, but an open ballot at the primaries; that is, it is known in advance what party's candidates a man will vote for at the primaries but not at the general election.

While at the primary election the voter sees only the ballot of the party with which he is enrolled, at the general election his ballot contains the names of all the candidates. These names appear under the titles of the offices for which they are running, and at the right of each

name is the title of the party or parties whose candidates they are. Thus each name appears but once, while the party names are repeated again and again. Where a candidate has been "endorsed" by more than one party, the voter will place his cross in the square opposite the name of his own party. This indicates the relative strength of the various parties, and thus determines the order in which they will appear on the ballot at the next election. The judges, as will be explained later, have no party title over their names, but only the word "Non-Partisan."

In case the elector wishes to vote a straight party ticket, and not "split" his vote by voting for candidates on more than one ticket, he will mark a cross opposite the name of his party. These names he will find in a column at the left side of his ballot. This kind of ballot, containing both party squares and a grouping of offices, is called the "party square" ballot. If party squares and all party titles were omitted, we should have the so-called "Massachusetts" ballot. Formerly, all names were grouped under the names of the parties only, and this was known as the "party column" ballot.

There is one distinction between the primary and the general election that it is not easy to see the reasons for, namely, that the result of the balloting in the latter is sent to the county Court of Common Pleas, and not to the county commissioners, and the recount of the votes is taken by the court.

A brief explanation about the non-partisan ballot may be of interest. In Philadelphia only the judges are voted for on a ticket that has no party label on it. The purpose of this arrangement is to lift the office of

judge above the strife of political parties or factions; and yet the police magistrates, curiously enough, are not included. Only the two highest on the list of non-partisan candidates for each office are voted for at the general election.

Party Machinery.—What a political party is has already been described, and we have been constantly hearing about it in our story of how elections are conducted. But we have yet to learn something about how parties are organized and how new parties may be started. This is a subject in which every citizen, young or old, ought to be interested.

Like most other organizations, political parties are managed by committees. First of all there is the ward committee, consisting of two committeemen from each voting precinct, elected by the voters at the primaries. These ward committees look after the local interests of their party, and act as managers whenever there is a close contest in their own wards. Of course, in all matters they are acting under the general direction of those higher in authority.

Over the various ward committees is the city committee, whose membership is secured by having each ward committee elect one member. It is through this central committee that the big party bosses are able to exercise strict control over the ward and division leaders and, through them, over the rank and file of the regular party voters.

In supreme authority, especially in matters that concern the state as a whole, is the state committee, made up of two representatives from each senatorial district, elected at the primaries. Philadelphia furnishes one-

sixth of its members, and exercises a good deal more than one-sixth of the influence of the committee, due to the fact that those in control of the parties in Philadelphia are also the state leaders.

It must not be forgotten that these committees, powerful as they are, must be guided or influenced by party sentiment as expressed through party clubs; and they must even keep in touch with what non-partisan civic associations are thinking and doing.

As a sort of apex to this pyramid of party organization stands the national committee, consisting of one representative from each state and territory, elected by the state delegations at the time of the national nominating convention. This committee manages the presidential campaign and makes all arrangements for the holding of the next convention, four years later.

The convention itself contains twice as many delegates from each state as the state has representatives and senators in Congress. This means that Pennsylvania sends 76 delegates out of a total of over 1,000; and of these 76, Philadelphia elects an even dozen and helps to elect as many more. The last twelve are known as delegates-at-large, and are twice as many as the state has congressmen-at-large and senators.

There are three main things for this convention to do. First, it draws up a party platform, telling what the party believes in and what it will try to do if it is in power for the next four years. Second, it puts in nomination candidates for President and Vice-President. Third, it selects a new national committee for the next four years.

Forming a New Party.—Now a word is necessary as

to how a new party may be started. Whenever a group of people in a certain locality—let us say Philadelphia—are not satisfied with the policies or with the candidates that have been nominated for certain offices by their own party, and are unwilling to support the policies or the candidates of one of the other parties, they may at once start a party of their own. To do this, at least five of the group must first file an affidavit with the Prothonotary (clerk of the Court of Common Pleas) of the county, stating that they have adopted a certain name for the new party they propose to start—this name to contain no words identical with those already in use by any political party. The next step is to secure signatures to a nomination paper for each candidate which the group proposes to put up for some office. Perhaps it may be only a candidate for one single office; perhaps it may be for every office in the city or county or state. These nomination papers—which look like the nomination petitions we have already heard about—are then filed with the Secretary of State at Harrisburg, together with a certificate from the Prothonotary stating that a new party name has been preëmpted by this particular group of electors. This completes the process, and a new political party—local, state, or even national in scope—has now been started. Usually these new parties are short-lived, but they often accomplish a good deal in a short time.

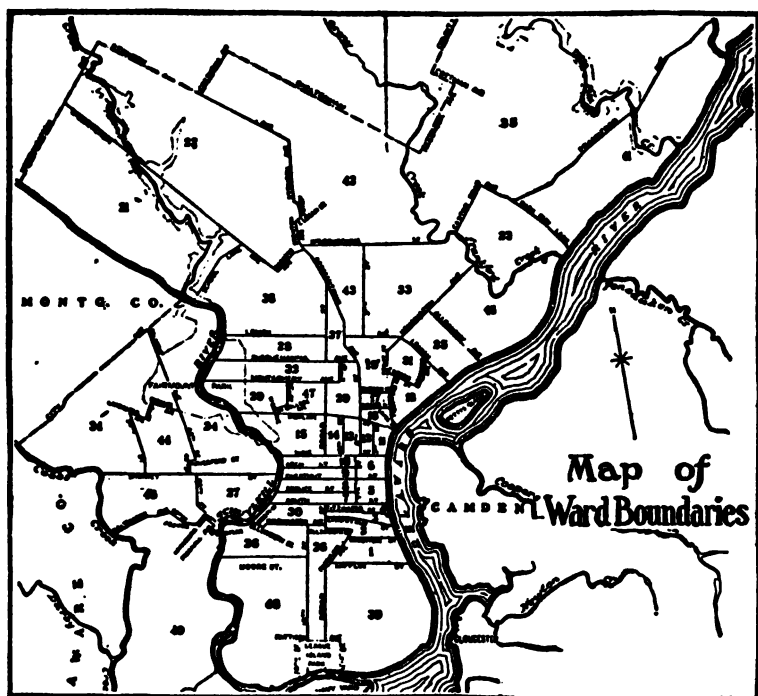
Why Parties at All?—No democratic nation of any considerable size has ever worked out a scheme for running its government without the aid of political parties. In England and the United States the great majority of the voters ally themselves with one or the

other of two great parties or groups of parties. In France and Italy and other European countries there are numerous small political groups, with a constant shifting of alliances between them. But in all democracies political parties have come to stay. In all alike, the parties or groups for the time being out of power are directing a helpful and steadying criticism at the acts and policies of the party or groups then in power. And in all alike, political parties and party machinery are serving as a coördinating force that ties together all the parts of the government. This last function is an especially valuable one in a government like ours, where the national and state governments are more or less set over against one another, and where the legislative, executive, and judicial branches of government are partially independent of each other. In such a system political parties become the one great unifying force that harmonizes all parts of the government and helps to coördinate its work.

The binding force that gives cohesion and power to political organizations, especially in our large cities, is a sort of give-and-take good fellowship that never forgets its supporters, and that is singularly generous in its distribution of offices and other favors. Too often, unfortunately, this sentiment does not rise above the clan spirit, but places the interest of the party or faction above the interest of the community at large. But despite this fact, party groups are useful, even in city government, provided they are based on issues that concern the city itself rather than the state or the nation.

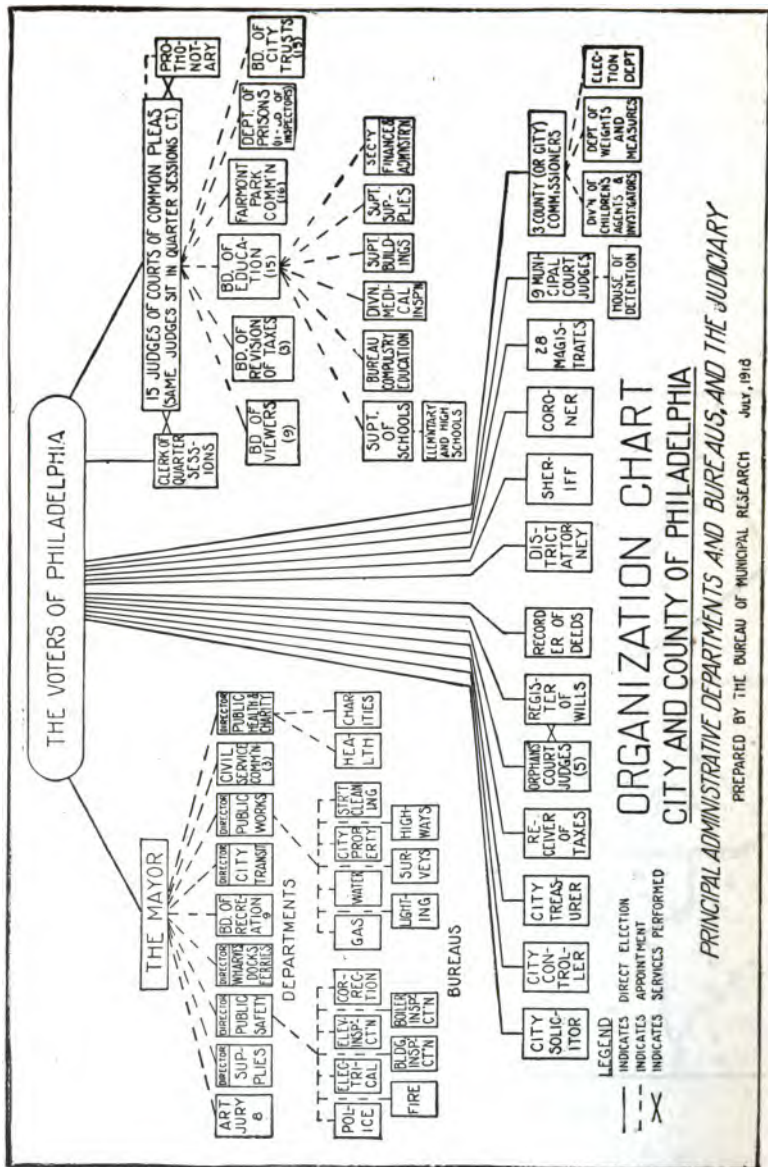
Not only must there be political parties, but there

must be party leaders and plenty of active party workers. It ought to be an honor to be a "politician," whether as a leader or as a worker in the ranks; and it will be when the average voter shall have decided, once for all, that party leaders shall lead and party workers shall work unselfishly for the public good, and not selfishly for their own personal ends.



(From the Manual of Councils)

THE WARD SYSTEM OF PHILADELPHIA



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